

Sept. 30, 1952

H. J. BOLIN

2,612,098

CASEMENT WINDOW FOR AIR CONDITIONERS

Filed March 3, 1950

3 Sheets-Sheet 1

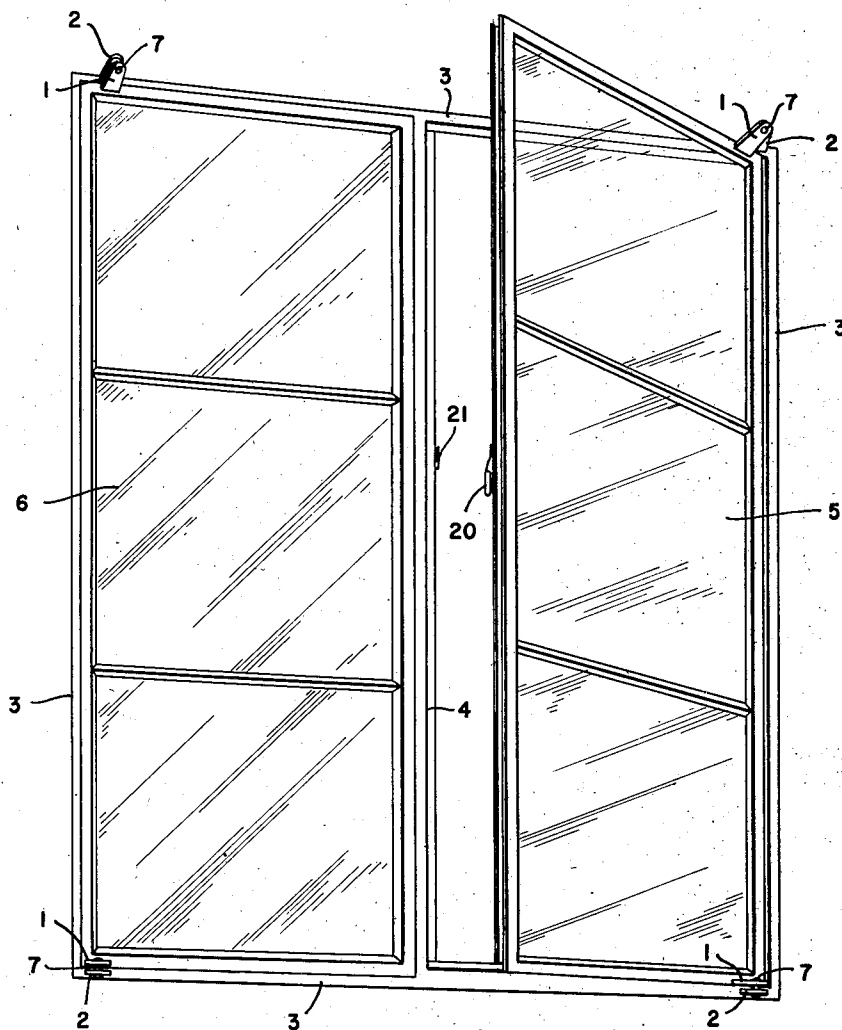


Fig. 1.

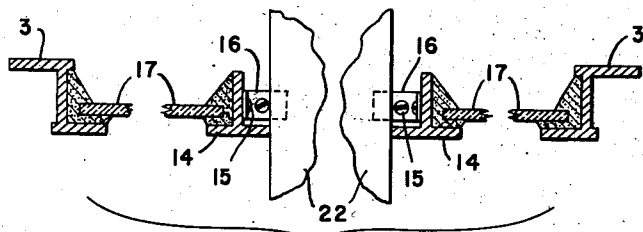


Fig. 5.

Inventor

Henry S. Bolin

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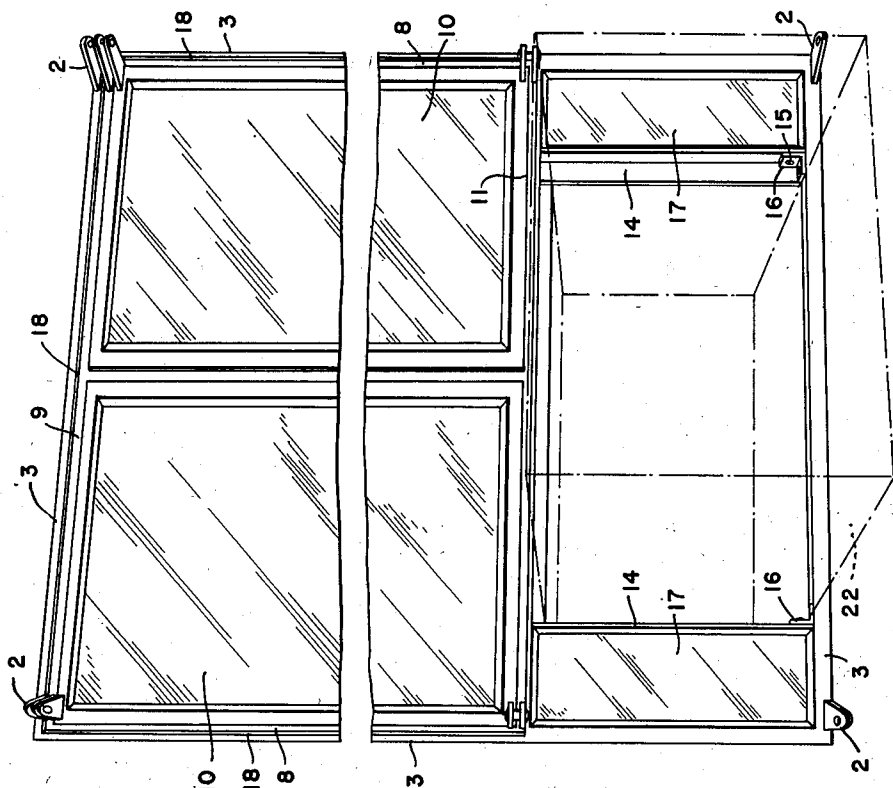


Fig. 2.

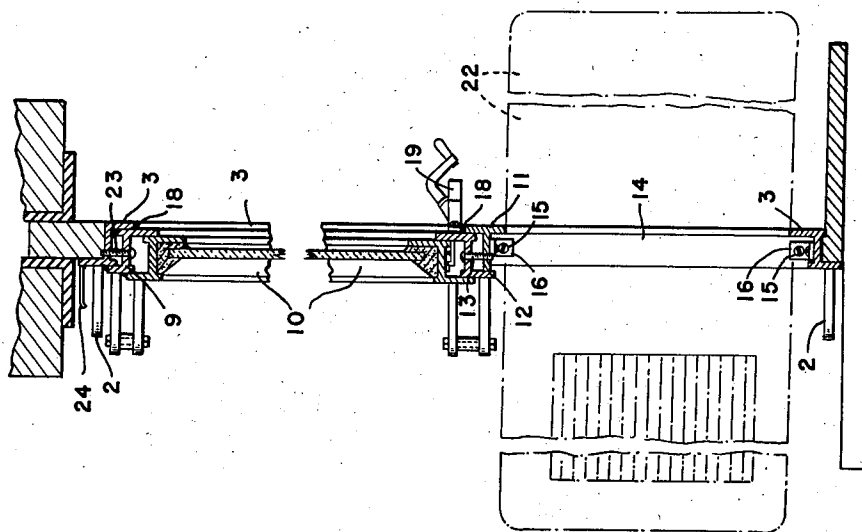


Fig. 3.

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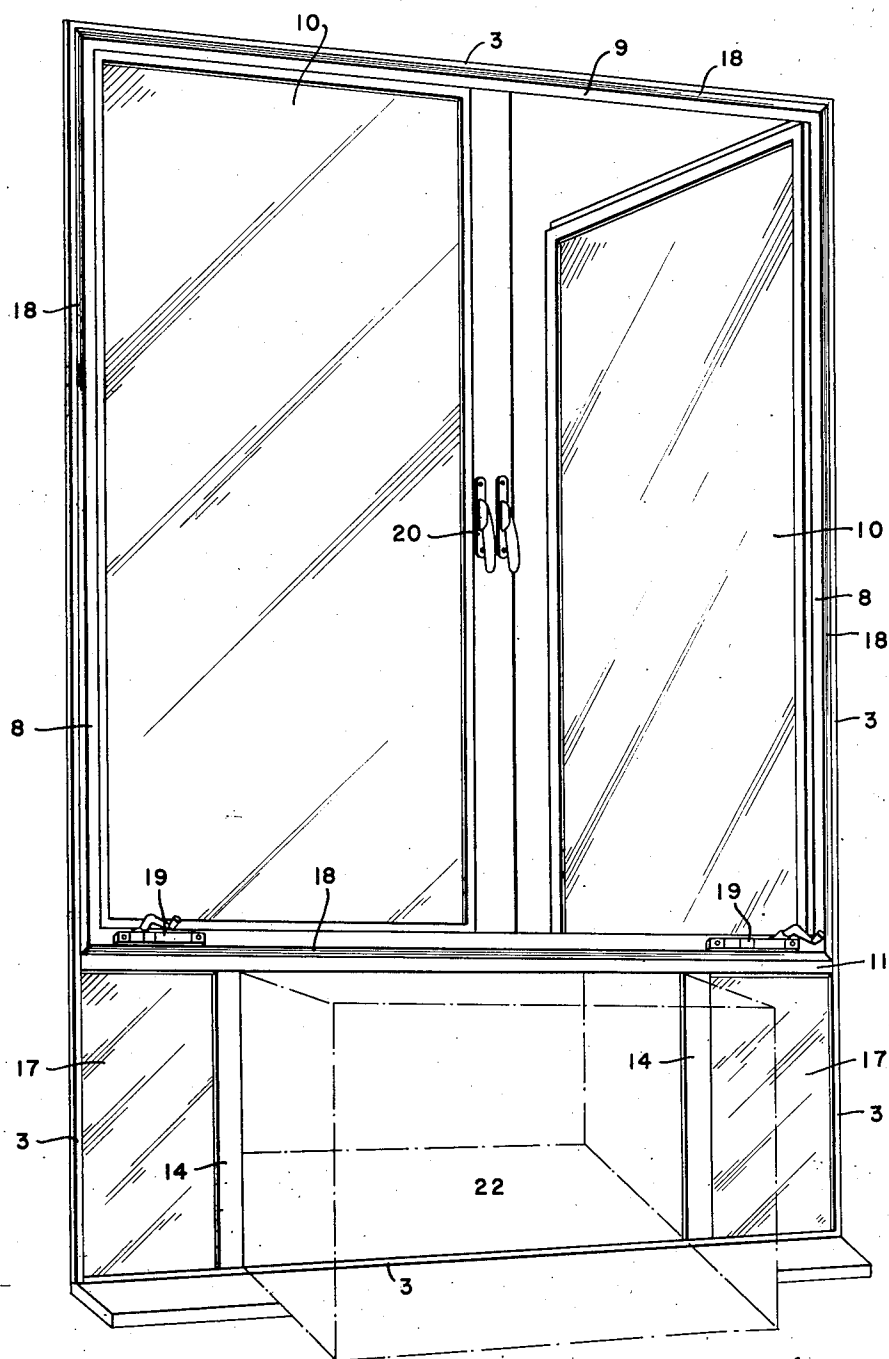


Fig. 4.

Inventor

Henry L. Bolin

UNITED STATES PATENT OFFICE

2,612,098

CASEMENT WINDOW FOR AIR
CONDITIONERS

Henry J. Bolin, Elmont, N. Y.

Application March 3, 1950, Serial No. 147,581

3 Claims. (Cl. 98—94)

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This invention has to do with the adaptation of a casement window to window air conditioner units.

One of the main features of my novel casement window is that it can be manufactured to the exact size of opening as required by these air conditioner units thereby insuring a perfect installation job.

For various reasons my object is not to damage present ventilators by cutting these down to the required height of the air conditioner unit but to save these ventilators for future use; instead I take out ventilators and center meeting rail of existing sash and install my novel casement sash inside existing casement frame.

If the air conditioner unit has to be removed from its present location, I can take out without great effort my novel casement window and restore the original casement ventilators and center meeting rail back to its original position; thereby not disturbing the architectural design of the building.

Depending upon the weather condition, the air conditioner need not run all the time; it is, therefore, one object of the present invention to provide a ventilated casement window above the air conditioner unit for ventilation and airing of this particular room when the air conditioner is not in operation.

It is another object of the present invention to provide on all air conditioners installed above the first floor extension hinges on my casement windows while will permit easy access for washing and cleaning of the window panes.

It is still another object of the present invention to provide glass inserts at both sides of the air conditioner which glass inserts are embedded in glazing compound at T-bars and the existing casement frame, which will when applying sponge rubber or other insulating material at contact points completely seal off this air conditioner against water or air leakage.

My invention will be of great importance when the more expensive types as architectural type aluminum or architectural type bronze casement windows have to be altered to receive these type of window air conditioners.

Casement windows for homes and apartment houses have been in use for a long time.

With these and other objects in view which will become apparent in the following detailed description, the present invention will be clearly understood in connection with the accompanying drawings, in which:

Figure 1 is front elevation of a standard case-

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ment window with two side hung open out ventilators;

Fig. 2 is a front elevation of my new casement window;

Fig. 3 is a cross section of the casement window showing the detail construction of the new casement window embedded into an original window frame;

Fig. 4 is a front elevation of my casement window with glazed ventilators and side glass panels; and

Fig. 5 is a horizontal cross section of T bar construction attachment clips and glass panels.

Figure 1 shows the standard casement window where I wish to place a sill model air conditioner. In order to do this I first remove the two side hung ventilators 5 and 6 by removing hinge bolts 7 between hinges 1 and 2. The center meeting rail 4 is then removed by cutting away the welds at head and sill which leaves me with the outside frame 3 securely anchored into masonry. Hinges 2 at head and sills are undamaged and still attached to the original frame 3 for easy replacement of said ventilators with a minimum amount of work.

Fig. 3 shows a vertical cross section of the invention installed into the original frame 3. Casement window manufacturers have their own standard measurements of windows and the casement windows of one manufacturer will not be the same as the windows of another manufacturer; it is, therefore, necessary to take a standard stock casement window and to cut this one down in width and height to fit the inside original sash frame. Head section 9 and jamb sections 8 fit snugly against the original frame section 3. The water drip 24 which is still attached to the original sash frame at its head will also protect my new installed casement window from water leakage. As shown in Figs. 2 and 3 a plastic caulking compound 18 is applied to all contact points between the sections 3 and 8 and between the sections 3 and 9 to insure a weathertight insulation against air or water leakage. The new sash is fastened to the existing sash frame at its head by means of a threaded hole of the section 3 which receives machine bolts. This new sash has been previously glazed with clear glass before installation.

Fig. 3 shows a detail of the T section 11 which is placed horizontally below the sill section 12 and these two sections are connected by means of threaded holes of the T section 11 using machine bolts 13. A plastic caulking compound 18 is applied at all contact points between the T section

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11 and the sill section 12 to insure weathertight insulation. Two T sections 14 are then placed vertically between the horizontal section 11 and the bottom of the frame section 3 to form an opening in accordance with the required measurements of the air conditioner which vary with the different manufacturers. These T sections 14 are fastened at their head and bottom by means of angle brackets 16 to a hole of the section 11 and a threaded hole of the section 3, respectively.

The space between the T section 14 and the original sash frame 3 is filled with two lights of clear glass embedded in glazing compound. The standard casement hardware consisting of a sill under screen rotor adjusters 19, a center, a locking handle 20 and the locking handle 21 is then attached with machine bolts. The installation of the new casement window is now completed and ready to receive the sill air conditioner.

When for some reason or other the air conditioner has to be removed from the present window and the original ventilators to be put back in place, all that is necessary is to take out the two side glass panels 10, to remove all attachment angle brackets 16 from the vertical and horizontal T sections 14 and 11, respectively, by unscrewing all bolts holding the sash section 3, 9 and 3, 8, respectively, together and to remove the sash.

Then the original ventilators 5 and 6 are attached with hinge bolts 7 between the hinges 1 and 2. Finally the center meeting rail is attached either by the attachment bracket 16 or by welding the same in place at its head and sill 3. In this manner the casement window is brought back to its original position and this window will in no way indicate that a sill air conditioner was ever installed in the window.

I claim:

1. A casement window comprising a first standard Z-bar frame having a top and bottom section and side sections, a second Z-bar frame of a height less than that of said first standard Z-bar

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frame, means for removably securing said second Z-bar frame to the corresponding sections of said first Z-bar frame, the top and bottom sections of said second Z-bar frame having hinges, window panes secured to said hinges to permit of opening and closing, respectively, said window panes, two T-sections disposed vertically between the respective bottom sections of said first Z-bar frame and said second Z-bar frame to form an opening between the said last mentioned bottom sections and said vertical T-sections, means for securing the said vertical T-sections at their ends in vertical position, said opening being adapted to receive an air conditioning unit, and a window pane disposed between each of said vertical T-sections and its adjacent side section of said first Z-bar frame.

2. The casement window, as set forth in claim 1, which includes a horizontal T-section disposed below and secured to the said second Z-bar frame and in which said securing means include angle brackets disposed between said vertical T-sections, the said first Z-bar frame and the horizontal T-section.

3. The casement window, as set forth in claim 1, which includes an air conditioning unit secured in said opening.

HENRY J. BOLIN.

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