Nov. 20, 1928. 1,692,288

F. CLARKE

WINDOW VENTILATOR

Filed Dec. 10, 1927

Fig. 1

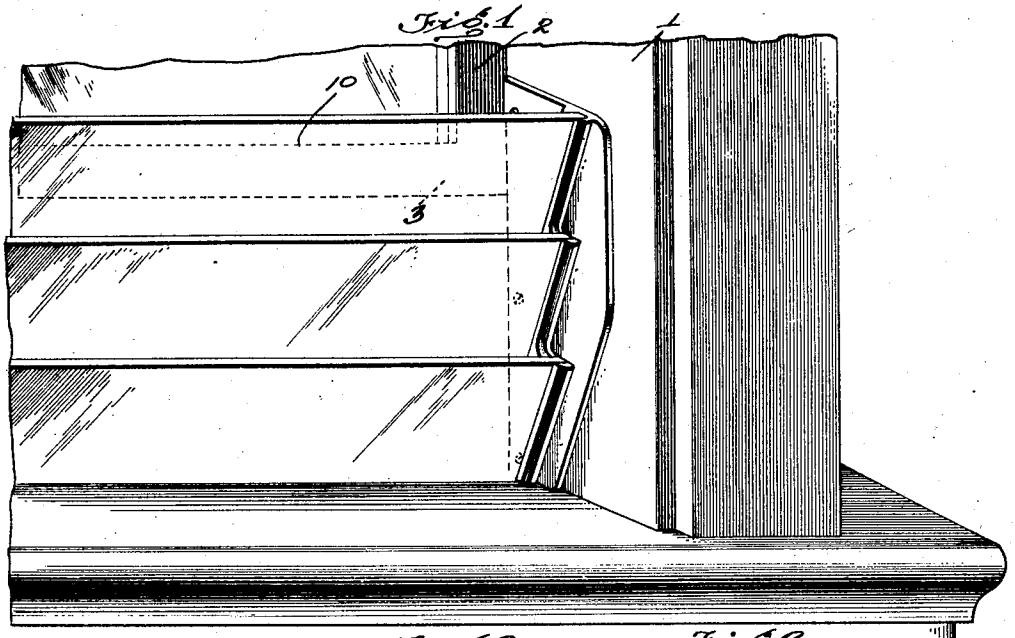


Fig. 2

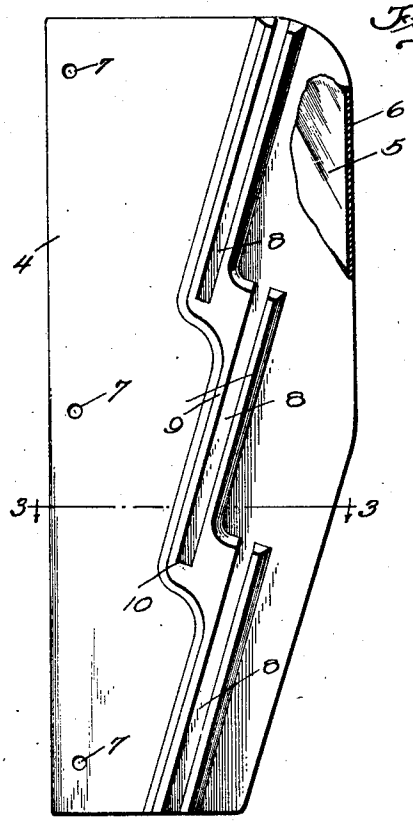


Fig. 3



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FRANK CLARKE, OF LOUISVILLE, KENTUCKY.

WINDOW VENTILATOR.

Application filed December 10, 1927. Serial No 239,085.

This invention relates to ventilators for windows, automobile louvers, and for any and all machines or appliances in or on which a ventilator of that character may be easily and quickly applied to operative position; and, more particularly, to such a device which can be applied to operative position on a window without interfering with the vertical movements of the window sash.

One of the objects of the invention is the provision of a ventilator which is adapted to permit a flow of air therethrough, and direct the air current upwardly, either in or out.

Another object of the invention is the provision of means for resiliently retaining in position the several panels of which the ventilator is composed.

Still another object of the invention is the provision of panel-supporting brackets not only equipped with means for resiliently clamping the panels, but also adapted for ready attachment to window frame, automobile or any other machine or appliance in or on which it is used.

Other objects of the invention will be made apparent in the following specification, when read in connection with the drawings forming a part thereof.

In said drawings:

Fig. 1 is a perspective view of one side of a window equipped with my ventilator.

Fig. 2 is a side elevation, with a portion broken away, of one of the panel-supporting brackets forming a part of the invention.

Fig. 3 is a section taken on the line 3—3 of Fig. 2.

Now referring specifically to the drawings, in which similar reference numerals indicate like parts throughout all the views, 1 is a window frame, in which is mounted the usual sliding sash 2, equipped with the lower rail 3. A bracket 4 is provided for each of the side frames 1, only one side frame being herein shown.

Each of the brackets 4 is composed of a plate 5, made either of metal, wood, fibre, hard rubber, glass, or any other substance which can be used for such purpose, and, in the preferred form, as illustrated in Figs. 1, 2, and 3, is entirely covered with sheet rubber 6, and apertures 7 are provided near the rear edge of the bracket, adapted to screws or other members for fastening the brackets to the frame. Panel-receiving channels 8 are formed as a part of the rubber covering 6, either as separate installations, or integral with said covering. As indicated in the drawings the channels 8 are arranged in exact parallelism, the upper channel terminating just below the top end of the channel directly therebeneath. The channels 8 are defined by two side walls 9 formed of rubber, and are elevated considerably above the plane of the covering 6, as clearly illustrated in Fig. 3. Each channel is provided at its lower end with a stop or abutment 10. In the preferred method of manufacture, the front cover sheets 6 are formed with the channels 8 and the raised walls 9 molded thereon, and the sheets affixed to the metallic plate 6 by vulcanizing process, glue, cement, or any other method. A plain cover sheet 6 is similarly applied to the rear face of the plate 5, and the overlapping edges of the two sheets 6, around the peripheral edges of the plate 5, are vulcanized together. It is of course obvious that, if found more desirable, the plate 5 may be covered with two or more of the rubber sheets 6, the overlapping edges of the sheets joined together, and the channels 8 and the walls 9 formed apart from the sheets 6, and thereafter fixed in position.

I have herein illustrated the brackets 4 as equipped with three of the channels 8, each adapted to receive panels 10. The panels are preferably of transparent, opaque, hammered or colored glass, but may be formed of any desired material, and it is obvious that any number of the panels may be used, a bracket 4, having the necessary number of channels, being provided.

In use, the extreme end portions of the panels 10 are placed in the channel 8, between the walls 9—9, the latter being so spaced that the width of the channel 8 is slightly less than the thickness of the panel. Downward pressure upon the panel will cause the walls 9—9 to yieldingly spread and permit the panel to be forced downwardly until its lower edge contacts the end wall or abutment 10. In this position the panel is securely but yieldingly retained in operative position, the walls 9—9 exercising a constant pressure upon the panel, and thereby preventing any rattling which, under the influence of passing air currents, would be incident to any structure wherein the walls 9—9 were formed of wood, metal, or any unyielding material. It is obvious that, if the walls 9—9 were formed of wood

they would soon become distorted by exposure to varied climatic conditions, and, if formed of metal, varying temperatures would result in such expansion or contraction as to either promote rattling noises or to dangerously compress the glass panels.

For the foregoing reasons the utilization of supporting brackets provided with panel-gripping elements of elastically yielding material, is of great importance. By forming the walls 9—9 of rubber, the panel 10 is permitted a slight lateral movement, thereby minimizing the chances of breakage by a force applied to the side of the panel. In some installations it will be necessary for the panels to project into the room, beyond the window casing. Under such circumstances, if an occupant of the room should accidently violently contact a panel, or rest his weight thereagainst, the rubber walls 9—9 would decrease the probability of rupture of the panel and possibility of injury to the occupant.

The rubber forming the walls 9—9 will endure indefinitely. When it loses its resiliency however, the fastening members are removed from the apertures 7, and a new bracket or brackets 4 immediately placed in position.

From the foregoing it will be obvious that I have provided a ventilator equipped with means automatically imposing a pressure upon the panels, irrespective of climatic conditions, including variations in temperature. As before stated such construction eliminates all disagreeable rattling of the panels, greatly minimizes the chances of breakage thereof, and possible resultant bodily injury, and permits substitution of parts, when necessary, without the services of a skilled operator.

It will be noted that in both embodiments of the invention I have shown the bottom of the front panel extending below the top of the rear panel, thereby preventing direct draft of air currents, and forcing said currents to move upwardly as they enter the room.

Modifications of the structure herein disclosed may be suggested to those skilled in the art, but my invention comprehends all embodiments falling fairly within the scope of the appended claims.

I claim:

1. A panel holder for window ventilators comprising a bracket adapted to be secured to a suitable support, a layer, of elastically yieldable material secured to the inner face of said bracket, and a panel receiving groove formed in said material.

2. A panel holder for window ventilators comprising a bracket formed of a rigid plate covered with elastically yieldable material having panel receiving grooves formed therein.

3. A panel holder for window ventilators comprising a bracket adapted to be secured to a suitable support, a layer of elastically yieldable material secured to the inner face of said bracket, and a panel receiving groove formed in said material and positioned laterally of said plate.

4. A panel holder for window ventilators comprising a bracket adapted to be secured to a support, a soft rubber covering enclosing said bracket, and panel receiving grooves formed in said covering.

5. A panel holder for window ventilators comprising a bracket adapted to be secured to a support, a soft rubber covering enclosing said bracket, and panel receiving grooves formed in said covering and positioned laterally of said bracket.

6. A panel holder for window ventilators comprising a rigid plate covered with soft rubber having panel receiving grooves molded therein, substantially as and for the purposes set forth.

7. A panel holder for window ventilators comprising a bracket having a body of elastically yieldable material mounted on one of its sides, and a panel receiving groove formed in said material.

In testimony whereof I affix my signature.

FRANK CLARKE.