Sept. 29, 1931. C. E. YEAGLE 1,825,437

WINDOW VENTILATOR

Filed July 22, 1929

Fig. 1

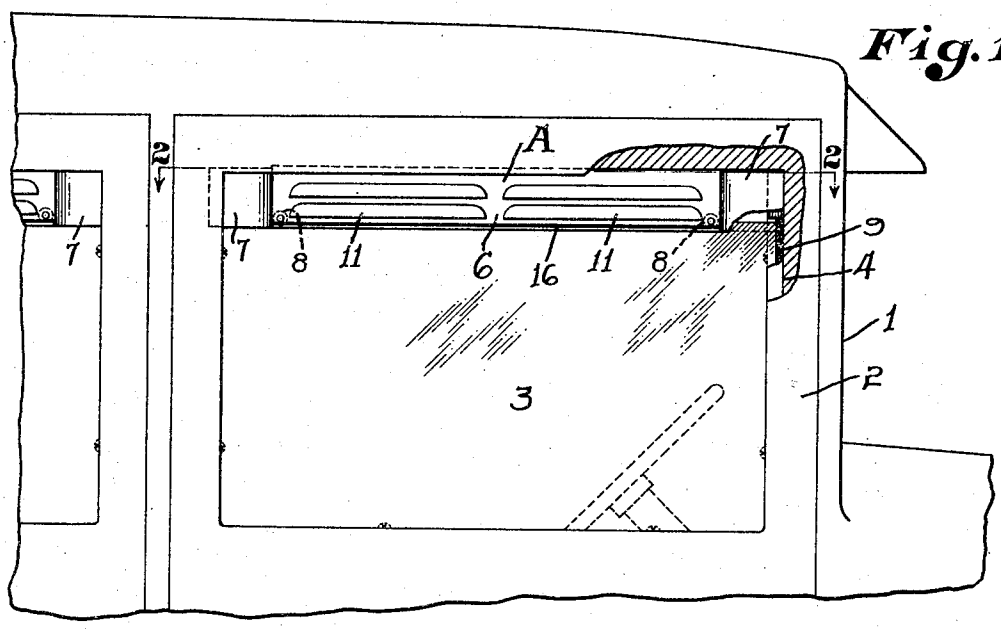


Fig. 2

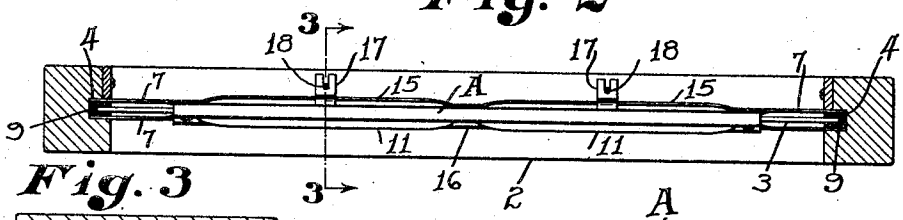


Fig. 3

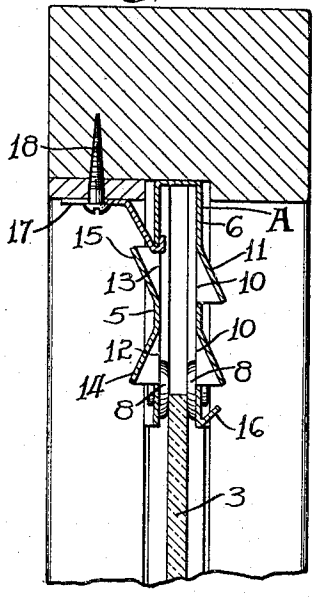


Fig. 4

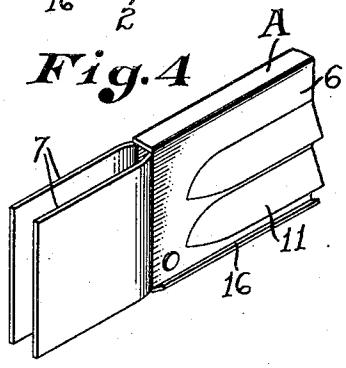
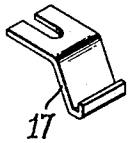


Fig. 5



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UNITED STATES PATENT OFFICE

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WINDOW VENTILATOR

Application filed July 22, 1929. Serial No. 380,012.

This invention relates to window ventilators and particularly to those adapted to use with the windows of closed automobiles.

The object of the invention is the provision of a simple, efficient and inexpensive ventilator of the character described which will admit fresh air into the interior of the automobile and at the same time prevent a direct draft from blowing through an open window onto an occupant, and will also facilitate the outlet of stale or warm air from the interior of the automobile.

A further object of the invention is a provision of a device of this character which may be easily and quickly inserted or removed from a window casing.

The invention is fully described in the following specification, and while, in its further aspect, it is capable of embodiment in numerous forms, a preferred embodiment thereof is illustrated in the following drawings, in which,—

Figure 1 is a side elevation of a portion of a closed automobile body, with a ventilator embodying my invention applied to one of the windows and with parts broken away, Fig. 2 is an enlarged section of the line 2—2 in Fig. 1, Fig. 3 is an enlarged section of the line 3—3 in Fig. 2, Fig. 4 is a fragmentary perspective view of an end portion of a ventilator embodying the invention, and Fig. 5 is a perspective view of one of the clips used for securing the ventilator in position in a window casing.

Referring to the drawings, 1 designates a closed automobile body having a window casing 2 therein, in the present instance, in one of the doors of the automobile, and in which casing the glass closure member 3 is mounted for vertical sliding movements in guide-ways 4 provided in the vertical members of the casing, as is customary in windows of this character.

The ventilator embodying the invention is designated "A" and is intended to be mounted in the upper portion of the window opening. This ventilator is of inverted U-form in vertical cross-section with the inner and outer side members 5 and 6 thereof spaced apart sufficiently to permit the closure member 3 to have movement therebetween, thus permitting said member to be raised to completely closed position with its upper portion disposed within the ventilator member, or to be lowered to any desired extent with respect to the ventilator. The ventilator "A" is intended to be mounted in the grooves, forming the guide for the closure member, and, to facilitate such mounting and prevent rattling, the ventilator is provided at each end thereof with a pair of opposing spring tongues 7 with one projecting from each end of the side members 5 and 6 of the ventilator. These tongues are spaced sufficiently to have a close binding fit in the respective guide casing 4, and, being yieldable, are capable of fitting guide casings of various widths.

To prevent the side panels 5 and 6 of the ventilator from striking the glass member 3 the sides 5 and 6 are provided at each end at their inner sides and in opposed relation with buttons 8, which engage opposite sides of the glass member 3 when raised therebetween, and not only prevent collapsing of the ventilator sides, but also assist in preventing rattling of the closure member 3 should it be loose in its guide ways. The packing 9, which is usually provided within the guide ways 4 in embracing relation to the vertical edges of the closure member 3 may, if desired, be extended up between the tongues 7 of the ventilator.

The outer panel or side 6 of the ventilator is provided with one or more ventilating openings 10, which are in the form of elongated slots provided lengthwise of the panel, and each has a top visor or baffle member 11 at its outer side.

The baffles 11 project outwardly and downwardly from the upper edge walls of the openings 10 and preferably extend at their lower ends at least to a level with the lower edge of the openings, thereby permitting air to pass inward through the openings 10 only by an upward current, as is apparent.

The inner panel 5 of the ventilator is provided with a lower row of ventilating openings 12 and an upper row of openings 13

disposed, in the present instance, substantially opposite the respective lower and upper rows of ventilator openings 10 in the front panel 6. The lower row of openings 12 are provided with downwardly projecting protecting baffles 14, while the upper row of openings 13 are provided with upwardly projecting baffles 15 with both of the members 14 and 15 disposed at the inner side of the ventilator with respect to the interior of the automobile. It is apparent that any air entering the interior of the automobile through the openings 12 will be directed downwardly by the baffles 14 and that the air entering the automobile through the openings 13 will be directed upwardly by the baffles 15. It is thus apparent that currents of air entering the car through the ventilator are baffled first, by the baffle member 11, and then by the baffle members 14 and 15.

It is known that in any ventilating opening there are two distinct streams of air passing in opposite directions and that one constitutes a lower stream of fresh air entering the ventilated compartment and the other an upper stream of warm or stale air passing from the compartment, and that the lower stream is about one-third the volume or vertical thickness of the upper stream. This action is facilitated by my ventilator by providing the top openings 13 with the upwardly directed baffle 15 and the downwardly directed baffles 14 in conjunction with the downwardly directed baffles 11 in the outer side of the ventilator.

The lower edge of the outer panel 6 of the ventilator is provided with a drip rail 16, which catches any water passing down the outer side of the panel and directs it to the opposite ends of the panel.

A simple manner of securing a ventilator in a window opening is to secure angled clips 17 to the automobile top interiorly thereof by screws 18 and to have the angled ends thereof engaging under and around the top edge walls of the ventilating openings 3.

While the ventilators, for cheapness of manufacture, are preferably stamped from sheet metal, they may be made of any other suitable material.

I wish it understood that my invention is not limited to any specific construction, arrangement or form of the parts as it is capable of numerous modifications without departing from the spirit of the claims.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A window ventilator having opposed side members with baffled openings therethrough and between which a window closure member is adapted to have reciprocatory opening and closing movements and spring tongues projecting from the side members at each end thereof for insertion into a respective closure member runway of a window casing.

2. The combination with a window casing having side runways therein, and a closure member mounted in the casing for vertical movements in said runway, of a ventilator of inverted U-form in cross-section mounted in the upper portion of the casing opening and having provision at its ends for engaging in the respective runways, said ventilator having the side members thereof disposed at opposite sides of the closure member when the latter is in closed or partially closed position, and having baffled air circulating openings therethrough, with the baffles of the outer side members projecting outwardly and downwardly with respect thereto and with some of the baffles of the inner side member projecting inwardly and downwardly and others projecting inwardly and upwardly with respect thereto.

In testimony whereof I have hereunto signed my name to this specification.

CYRUS E. YEAGLE.