Aug. 18, 1925. 1,550,503

R. G. COFFMAN

COACH ROOF VENTILATOR

Filed Feb. 13, 1925

Fig. 1.

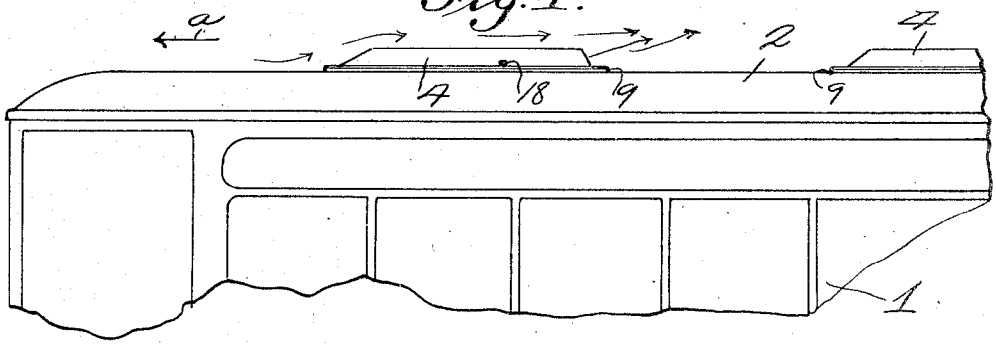
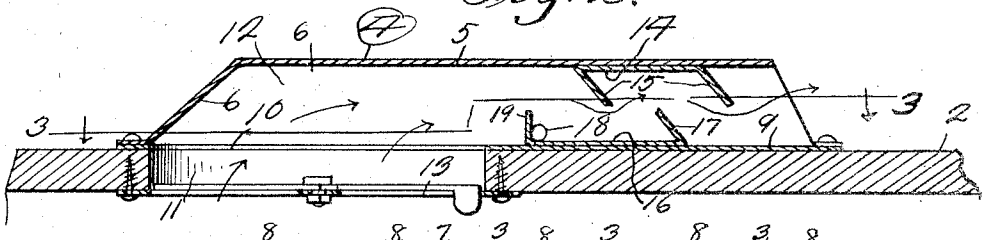


Fig. 2.



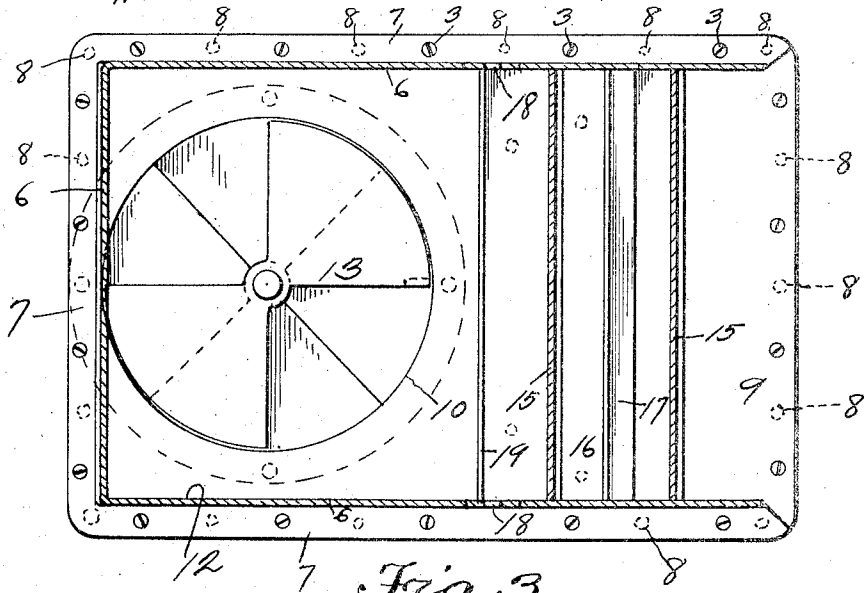


Fig. 3

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UNITED STATES PATENT OFFICE.

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COACH ROOF VENTILATOR.

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To all whom it may concern:

Be it known that I, ROY G. COFFMAN, a citizen of the United States, residing at Lima, in the county of Allen, State of Ohio, have invented a new and useful Coach Roof Ventilator; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to coach roof ventilators and has for its object to provide a device of this character which is relatively thin and which may be easily and quickly attached to a coach roof, and provided with means whereby foul air from within the coach will pass outwardly through the rear end of the ventilator to the atmosphere. Also to provide an opening in the roof in communication with the chamber in the forward end of the ventilator, and an air regulating disc in said opening whereby the amount of air allowed to pass outwardly from the coach through the ventilator may be regulated.

A further object is to provide a transversely disposed channel member secured to the inner side of the upper wall of the ventilator and having downwardly and rearwardly extending flanges forming rain guards for preventing rain from being driven in the coach through the ventilator.

A further object is to provide the lower wall of the ventilator with a transversely disposed channel member having upwardly extending flanges, and in which channel member any water which may be driven into the ventilator will collect and be discharged through drain apertures in the longitudinal side walls of the ventilator.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawing, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:—

Figure 1 is a side elevation of a portion of a coach top, showing the ventilator applied thereto.

Figure 2 is a longitudinal sectional view through the ventilator and a portion of the coach roof.

Figure 3 is a horizontal sectional view taken on line 3—3 of Figure 2.

Referring to the drawing the numeral 1 designates a portion of the body of a conventional form of coach, and 2 the top thereof. Secured to the upper side of the top 2 of the coach, by means of screws 3 is the substantially rectangularly shaped casing 4 of the ventilator. Casing 4 of the ventilator comprises an upper wall 5, the longitudinal sides of which are provided with downwardly extending flanges 6, which flanges terminate in horizontally disposed flanges 7, which are spot welded at 8 to the horizontally disposed plate 9, which rests on the upper side of the top 2 of the coach. The forward end of the casing 4 is preferably inclined as clearly shown in Figures 1 and 2 for deflecting the air as the coach moves in the direction of the arrow *a*. Plate 9 adjacent its forward end is provided with a round opening 10, which opening registers with the opening 11 in the coach top 2, therefore it will be seen that foul air from within the coach body 1 will pass upwardly into the chamber 12 of the casing 4, and thence rearwardly through the rear open end of the ventilator to the atmosphere. To regulate the amount of air which may pass outwardly through the ventilator, a damper 13 is provided, on the inner side of the top 2 of the coach, and which damper may be controlled from within the vehicle.

Extending transversely of the chamber 12 adjacent its rear end is a channel member 14, which may be welded or otherwise secured to the top 5, and which channel member 14 is provided with downwardly and rearwardly extending rain deflecting flanges 15, against which any rain or water will be driven by the wind, and which water will be deflected downwardly by the deflecting flanges 12 into the transversely disposed water receiving channel 16, carried by the plate 9 and secured thereto by spot welding or in any other suitable manner. Channel 16 has its forward flange 17 disposed between the rain deflecting flanges 15, and inclines upwardly and rearwardly, therefore it may be seen that water which may be driven into the open end of the ventilator at a point below the planes of the deflecting flanges 15 will be deflected upwardly and will either enter the water collecting channel 16 or will be forced into engagement with the inner deflecting flange 15, and

will then flow downwardly into the rain collecting channel 16. Water collecting channel 16 collects the water which may be driven into the open end of the ventilator, however it is obvious that a continued accumulation of water within the channel 16 would cause said channel to overflow, and to obviate this difficulty the side flanges 6 of the casings are provided with apertures 18 preferably adjacent the rear flange 19 of said channel, and which rear flange 19 is disposed rearwardly of the inner deflecting flange 15, therefore it will be seen the water collected by the channel 16 will be discharged at opposite sides of the ventilator onto the roof of the coach, and danger of water driving into the coach top is obviated.

The invention having been set forth what is claimed as new and useful is:—

1. The combination with a coach top, of a ventilator therefor, said ventilator comprising a horizontally disposed casing secured to the coach top outside thereof and having a chamber therein, the rear end of which is open, a damper carried by the inner side of said top and controlling the flow of air through an opening in the top in communication with the forward end of the chamber, a transversely disposed water collecting channel in the lower side of the chamber adjacent its rear end and rearwardly of the top opening and having its flanges upwardly extending, a transversely disposed channel carried by the upper side of the casing within the chamber thereof and having its flanges downwardly and rearwardly inclined in staggered relation to the upwardly extending flanges of the water collecting channel, the opposite sides of said casing being provided with discharge apertures in registration with the ends of the water collecting channel.

2. The combination with a coach top having an opening therein, of a ventilating casing secured to the upper side of said top and having an opening in the bottom thereof adjacent its forward end in registration with the top opening and in communication with the chamber of the casing, of transversely disposed spaced flanges carried by the upper wall of the casing within the chamber adjacent its rear end and inclining downwardly and rearwardly, a transversely disposed water collecting channel in the bottom of the casing rearwardly of the top opening and having its flanges upwardly extending in staggered relation to the flanges carried by the upper side of the casing, said water collecting channel at its outer ends being in communication with water disposed ports extending through opposite sides of the ventilator casing.

3. The combination with a coach top having an opening therein, of a ventilator casing secured to the top and having a chamber therein in communication with the top opening, downwardly and rearwardly extending rain deflecting flanges within the chamber rearwardly of the top opening, a transversely disposed rain collecting channel within the bottom of the chamber and formed by spaced flanges in staggered relation to the rain deflecting flanges, said casing at opposite sides thereof being provided with water discharge openings in communication with the chamber of the casing and the ends of the rain collecting channel.

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

ROY G. COFFMAN.