Feb. 21, 1933. W. T. THORP 1,898,859

VENTILATING SYSTEM FOR INCLOSED CARS

Filed May 10, 1930

Fig. 1.

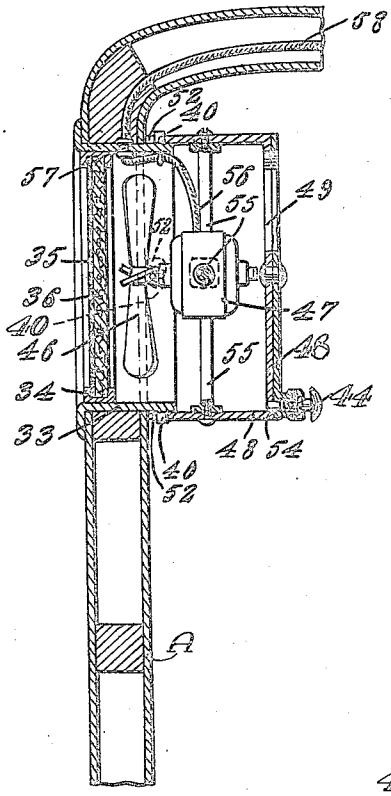


Fig. 2.

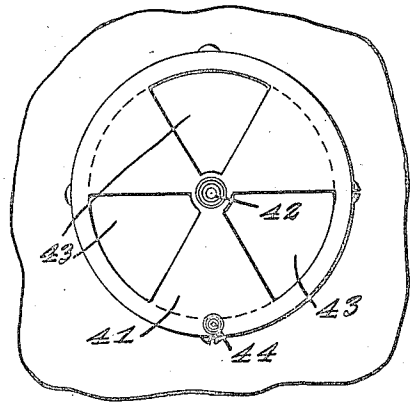


Fig. 3.

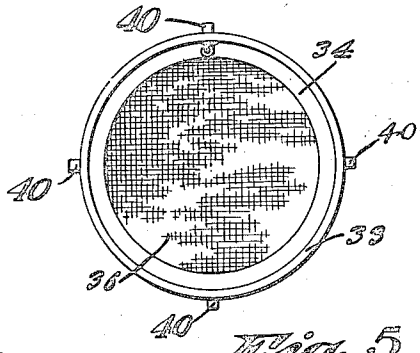


Fig. 4.

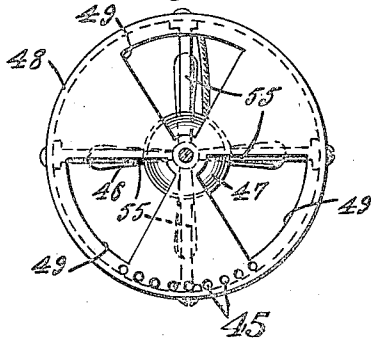
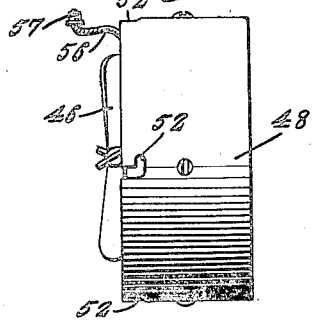


Fig. 5.



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UNITED STATES PATENT OFFICE

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VENTILATING SYSTEM FOR INCLOSED CARS

Application filed May 10, 1930. Serial No. 451,369.

This invention relates to means for ventilating closed vehicles, an object being to provide means for supplying air to the interior of automobiles, busses, cars and other closed vehicles in a manner to eliminate direct draft and to prevent the entrance of rain or snow.

Another object of the invention is the provision of means for supplying air to the interior of closed vehicles for the purpose of ventilation, both when the vehicle is standing and in motion, and for regulating the air supply.

Another object of the invention is the provision of means for filtering the admitted air, so that the occupants of the vehicle will be protected from dust, dirt and other impurities in the atmosphere.

A further object of the invention is the provision of a ventilator, which, in addition to the above and other advantageous features, may be readily installed for use.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings:—

Figure 1 is an enlarged fragmentary vertical sectional view through a ventilator constructed in accordance with the invention.

Figure 2 is a fragmentary elevation looking at the inner end of the ventilator as shown in Figure 1.

Figure 3 is a similar view with the inner section of the frame or casing removed.

Figure 4 is an elevation looking at the inner end of the frame or casing with the adjustable damper plate removed.

Figure 5 is a side elevation thereof.

Referring to the drawings in detail wherein like characters of reference denote corresponding parts, the ventilator constituting the present invention is adapted to be applied to an automobile body A.

This ventilator comprises a frame or housing 33 which extends through the opening provided in the body A of the automobile and accommodates a frame 34. This frame 34 carries a screen 35 and a filtering element 36.

The inner opened end of the frame or housing 33 is closed by a removable cap 48 and this cap is provided with openings 49. The cap 48 is also provided in its flange with bayonet slots 52 which accommodate pins 40 extending from the frame or housing 33 and provides means for the removable engagement of the cap with the frame. A plate 41 is pivotally mounted upon the cap as shown at 42 and this plate is provided with openings 43 which are adapted to be moved into and out of register with the openings 49 to control the passage of air through the ventilator. The plate 41 may be adjusted with respect to the cap through the medium of a spring pressed plunger 44 which is adapted to engage any one of a number of spaced openings 45 provided in the cap 48.

If desired the ventilator may be provided with a suction fan 46 which is driven from a motor 47 mounted within the cap 48. Passage of air through the ventilator arranged as shown in Figure 1 is regulated by the damper plate 41 and the speed of operation of the fan, the damper plate being adjustably held in position by means of the spring pressed plunger 44 which engages within spaced openings 45 provided in the cap 48.

A motor 47 is mounted upon legs 55 and receives current through a conductor cable 56 which is plugged into a socket 57 carried by the frame or casing 33. This socket has connected thereto a conductor cable 58 by means of which current may be supplied from the battery of the automobile.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claims.

Having described the invention what is claimed is:—

1. In a ventilator for closed vehicles, a cylindrical casing adapted to be positioned within an opening provided in the body of the vehicle and open at opposite ends, a screen fitted within the outermost end of said casing, a cap telescoped upon the innermost end of said casing and having vent

openings, said cap having peripheral bayonet-shaped slots, lugs on the casing and received in said slots for detachably locking the cap upon the casing, a shutter pivoted to the cap to regulate vent openings therein, and a latch carried by the shutter and engageable at selective points with the cap to hold the shutter in adjusted position.

2. In a ventilator for closed vehicles, a cylindrical casing adapted to be positioned within an opening provided in the body of the vehicle and open at opposite ends, a screen fitted within the outermost end of said casing, a cap telescoped upon the innermost end of said casing and having vent openings, said cap having peripheral bayonet-shaped slots, lugs on the casing and received in said slots for detachably locking the cap upon the casing, a shutter pivoted to the cap to regulate vent openings therein, a latch carried by the shutter and engageable at selective points with the cap to hold the shutter in adjusted position, and a motor operated fan interiorly of the casing between the cap and said screen.

In testimony whereof I affix my signature.

WILLIAM T. THORP.