Nov. 18, 1924. 1,516,403

V. W. PAGE

COWL VENTILATOR AND FILLING OPENING FOR COWL TANKS

Filed June 4, 1921

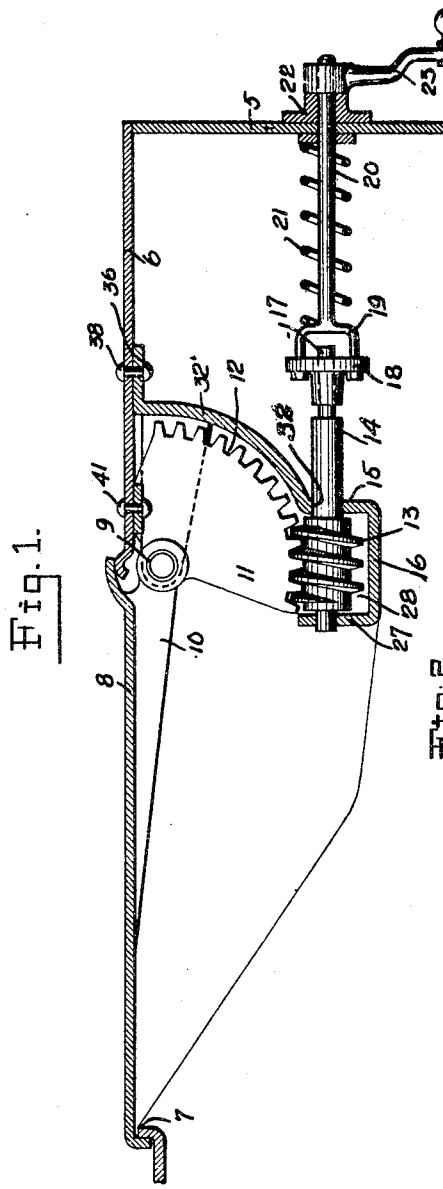

Fig. 1.

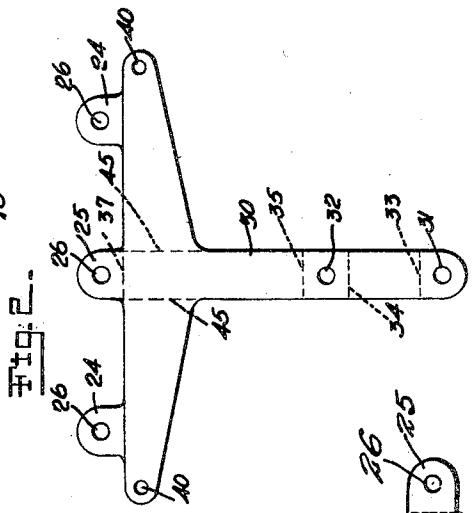

Fig. 2.

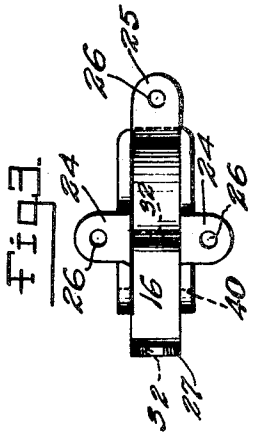

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

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COWL VENTILATOR AND FILLING OPENING FOR COWL TANKS.

Application filed June 4, 1921. Serial No. 475,151.

To all whom it may concern:

Be it known that I, VICTOR W. PAGÉ, a citizen of the United States, and a resident of the city of New York, Kew Gardens, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Cowl Ventilator and Filling Opening for Cowl Tanks, of which the following is a full, clear, and exact description.

The present invention relates to new and useful improvements in motor vehicles and it pertains more particularly to a body construction therefor.

It is one of the objects of the present invention to provide an operating means for cowl ventilators whereby the ventilating opening may be controlled from the driving compartment of the car.

It is a further object of the invention to utilize the ventilator as means for gaining access to the fuel tank when the same is located in the cowl of the car as more clearly shown in an application for Letters Patent filed by me on April 22, 1921, Serial No. 463,735.

It is a further object of the invention to provide means by which the door of the ventilating opening may be partially opened and maintained in said partially opened position by the operating means thereof.

With the above and other objects in view, which will appear as the nature of the invention is better understood, reference is had to the accompanying drawings in which—

Figure 1 is a detail sectional view of a motor vehicle cowl showing the preferred form of the invention;

Fig. 2 is a detail view of a portion of the blank from which a bracket for supporting the operating mechanism is formed; and

Fig. 3 is a plan view of the supporting bracket.

Referring again to the drawings and more particularly to Figs. 1 and 2, the reference character 5 designates the instrument board, dash or front wall of the driver's compartment of a motor vehicle, and 6 designates the rear portion of the cowl of said vehicle. The cowl 6 is provided with an opening 7 and said opening 7 is adapted to be closed by means of a pivoted door 8, said door being pivotally mounted as at 9. Secured to the door 8 is an arm 10, and rigidly carried by the arm 10 is a segment 11 provided with a plurality of teeth 12.

Meshing with the teeth 12 is a worm gear 13 and said worm gear 13 is carried by a shaft 14 revolubly mounted as at 15 in a bracket 16. The shaft 14 is reduced as indicated by the reference character 17 and mounted upon the reduced end 17 of the shaft 14, is a plate 18. This plate 18 is provided with openings for the reception of a forked or bifurcated member 19 carried by a shaft 20. Surrounding this shaft 20 is a coil spring 21, one end of which engages the forked or bifurcated member 19 and the other end engages the forward face of the wall 5. This shaft 20 extends through a bearing 22 in the wall 5 and is provided on its projecting end with an operating handle 23, by means of which said shaft may be rotated.

In Fig. 2 is shown a blank of sheet metal from which the bracket 16 is formed, and said blank is substantially T-shaped and provided along its upper edge with a plurality of lugs 24. Between the lugs 24 and opposite the stem of the T-shaped member is a lug 25, said lugs 24 and 25 being perforated as indicated by the reference character 26. The stem 30 of the T-shaped blank is provided with a perforation 31 near its end, and spaced with respect to the perforation 31 is a perforation 32. The end of the stem is bent forwardly upon the line 33 to form the portion 27 of the bracket and is bent upwardly upon the line 34 to form the housing 28 within which the screw 13 is adapted to operate.

The rear portion 32 of the bracket is formed by bending the stem of the T-shaped member upon the line 35, and the portion 36 of the bracket is formed by bending the T-shaped member upon the line 37, the rivet 38 passing through the perforation 26 in the lug 25. The perforations 40 form the means for pivotally mounting the door of the ventilator opening and the perforations 26 in the lugs 24 of the arms of the T-shaped member are adapted to receive rivets 41, these rivets 41 together with the rivet 38 in the lug 25 forming the means for securing the bracket in position within the cowl of the vehicle. In order to position the perforations 40 to receive the pintle of the door

8, the arms of the T-shaped member are bent upon the lines indicated by the reference character 45.

From the foregoing it will be seen that this form of the invention not only provides a suitable support for the operating mechanism of the door, but also provides for the pivotal mounting of the door itself within the cowl.

This form of the invention operates as follows:

Upon rotation of the shaft 20 through the medium of its operating handle 23, the shaft 14 together with the gear 13 will be rotated. Owing to the engagement of the worm 13 with the segment 11, the segment will be rocked about the pivotal point and the door moved to open position. By reason of the construction it is apparent that the door will be maintained in open position at any point since the worm cannot be driven by means of the segment 11.

I claim:

1. A ventilating device, comprising in combination, a hinged door, a stationary member, a bracket formed from a T-shaped blank having lugs supported on said stationary member, a pair of arms extending from said bracket and serving as means for pivotally mounting the door, and operating means therefor, a portion of said operating means being mounted in bearings formed in said bracket.

2. In a ventilating device, a stationary member, a hinged door, a bracket having lugs secured to the stationary member, the bracket being provided at its upper end with a pair of projecting arms between which the door is pivotally supported and at its lower end with a U-shaped member, and operating means for the door, a portion of the operating means being mounted in the U-shaped member of the bracket.

VICTOR W. PAGÉ.