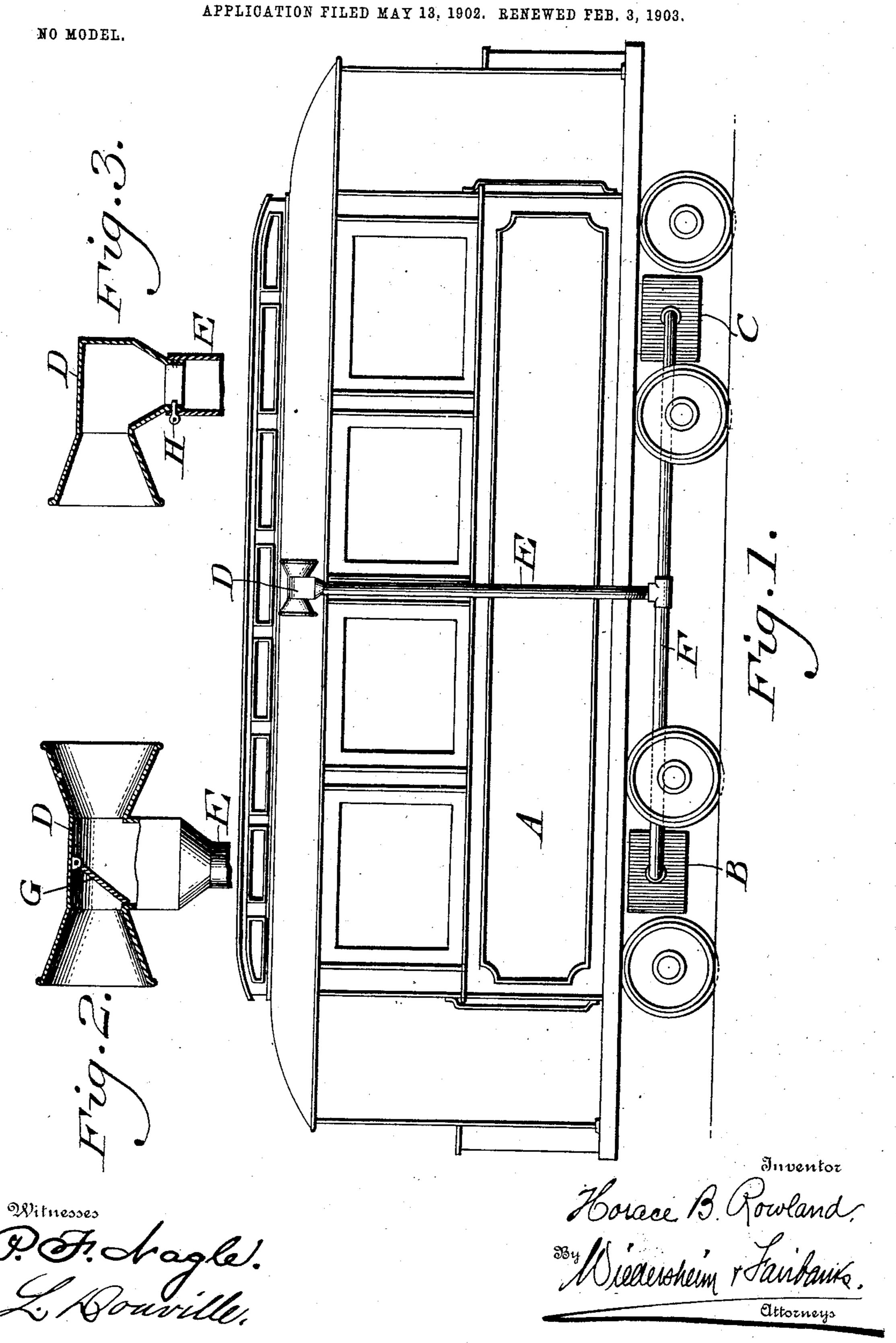
H. B. ROWLAND.

VENTILATOR FOR MOTORS FOR CARS.



## United States Patent Office.

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## VENTILATOR FOR MOTORS FOR CARS.

SPECIFICATION forming part of Letters Patent No. 724,950, dated April 7, 1903.

Application filed May 13, 1902. Renewed February 3, 1903. Serial No. 141,703. (No model.)

To all whom it may concern:

Be it known that I, HORACE B. ROWLAND, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ventilators for Motors for Cars, of which the following is a specification.

My invention consists of an improved ventilator for motors or generators of cars, which is simple and efficient in its action and is provided for cooling the motors or generators and for keeping the same clean.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a side elevation of a car, showing a ventilator for motors or generators embodying my invention applied thereto. Fig. 2 represents a partial sectional view, a partial elevation of a form of hood employed. Fig. 3 represents a sectional view showing a hood that may be employed.

Similar letters of reference indicate corre-

sponding parts in the figures.

Referring to the drawings, A designates a car to which is applied in suitable or wellknown manner motors around which are the casings B and C, which cover the same, said casings having suitable openings therein. 30 Secured to the car at a suitable point, in the present instance at the top thereof, is a hood D, which is so arranged that no matter in which direction the car is moving the same will receive and collect air. E designates a 35 pipe which leads from said hood downwardly and is connected with a pipe F, which communicates at its opposite ends with the interior of the casings B and C, it being understood, however, that, if desired, said pipe E may connect with branch pipes each of which leads to one of the casings B or C, the object being to conduct air from the hood into the motor-casing to ventilate the same. In order to collect the air in the hood, I may

make the hood open at both ends and supply 45 a valve Gon the interior of said hood, whereby the same will be so operated that the end of the hood toward the direction in which the car is moving will be open, while the valve will close the other end, whereby it will be 50 seen that no matter in what direction the car is going the air will be collected by the hood and directed into the motor-casings.

In Fig. 3 I have shown a construction wherein the one end of the hood D is open, 55 the said hood being revoluble in the pipe E and is provided with means, such as a pin H, locking the hood, so that the open end is always placed and held in the direction in which the car is moving, the object of which 60 is evident.

It will be appreciated that in lieu of placing the hood upon the top of the car I may secure the same at any suitable point thereon and that, if desired, I may employ a plu-65 rality of hoods and that I may have a single hood collecting and directing air to a single motor-casing.

It will be evident that various changes may be made by those skilled in the art which 70 will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact construction herein shown and described.

Having thus described my invention, what 75 I claim as new, and desire to secure by Letters Patent, is—

Patent, is—

The combination of a plurality of motors and their casings, of a pipe connecting said casings, a pipe communicating with said pipe 80 intermediate the casings, and a hood on said pipe constructed to collect air and direct the same to said casings regardless of the direction in which the car is moving.

HORACE B. ROWLAND.

Witnesses:

JOHN A. WIEDERSHEIM, C. D. MCVAY.