

No. 886,558.

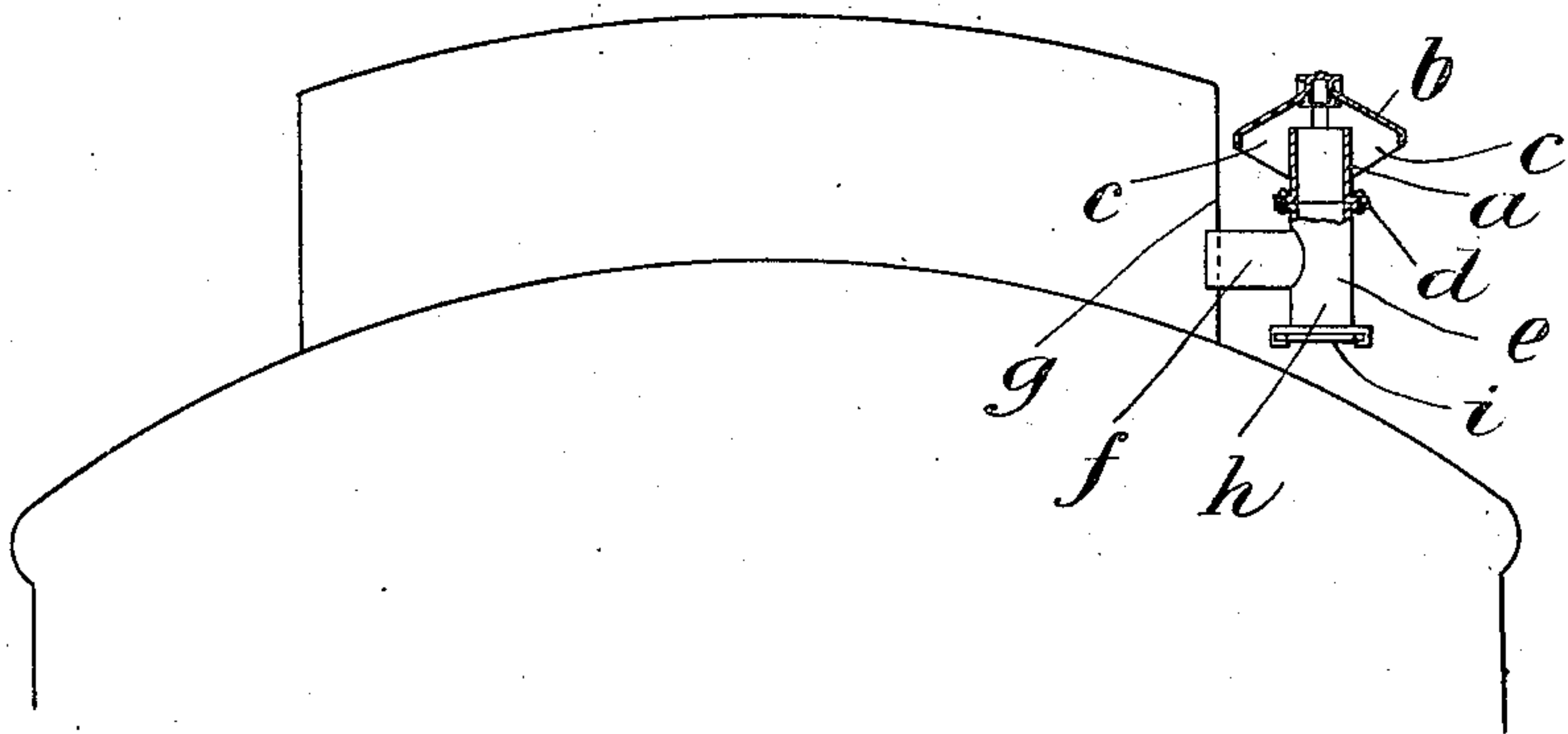
PATENTED MAY 5, 1908.

J. E. WARD.

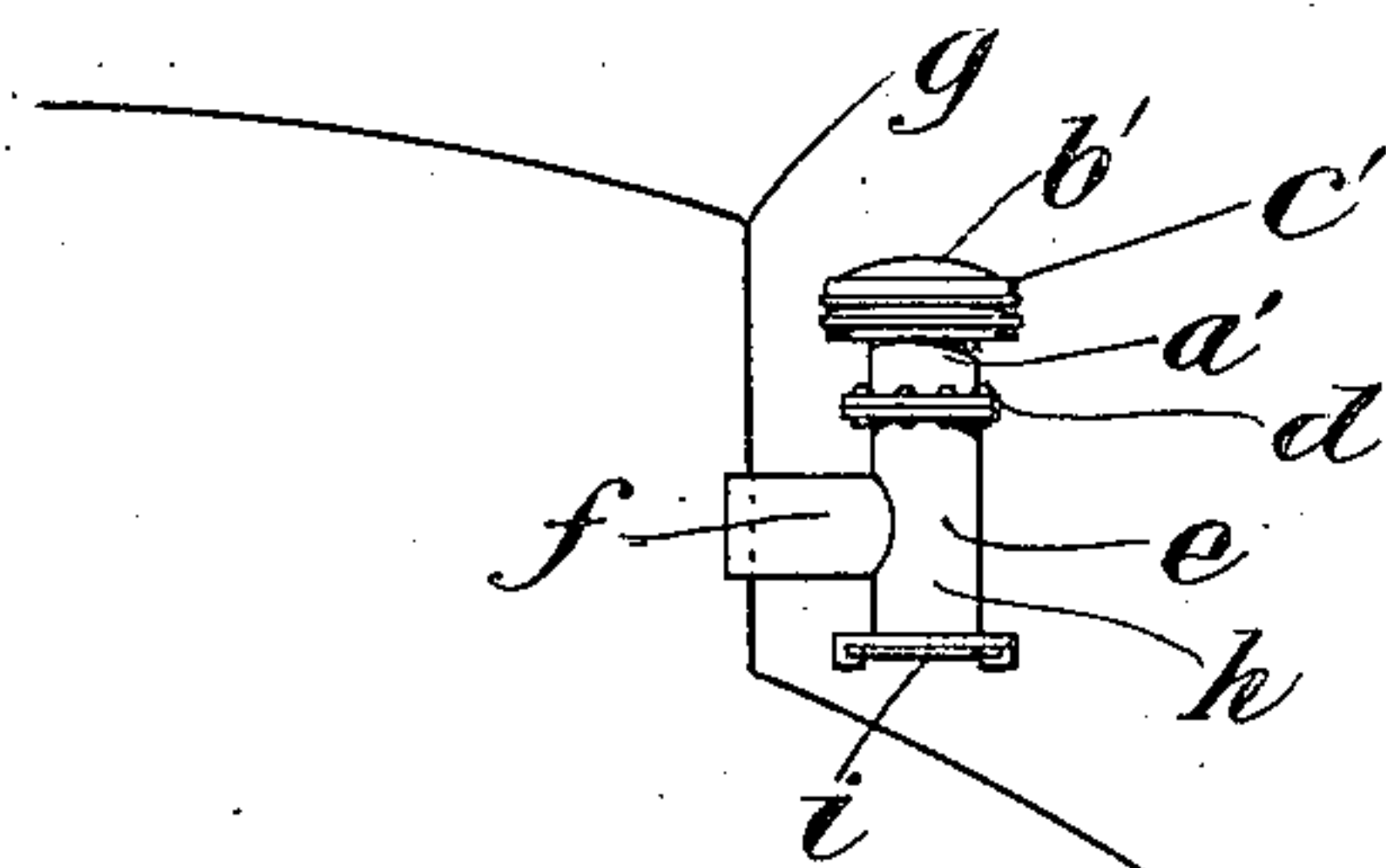
VENTILATOR FOR RAILWAY CARS, &c.

APPLICATION FILED OCT. 22, 1907.

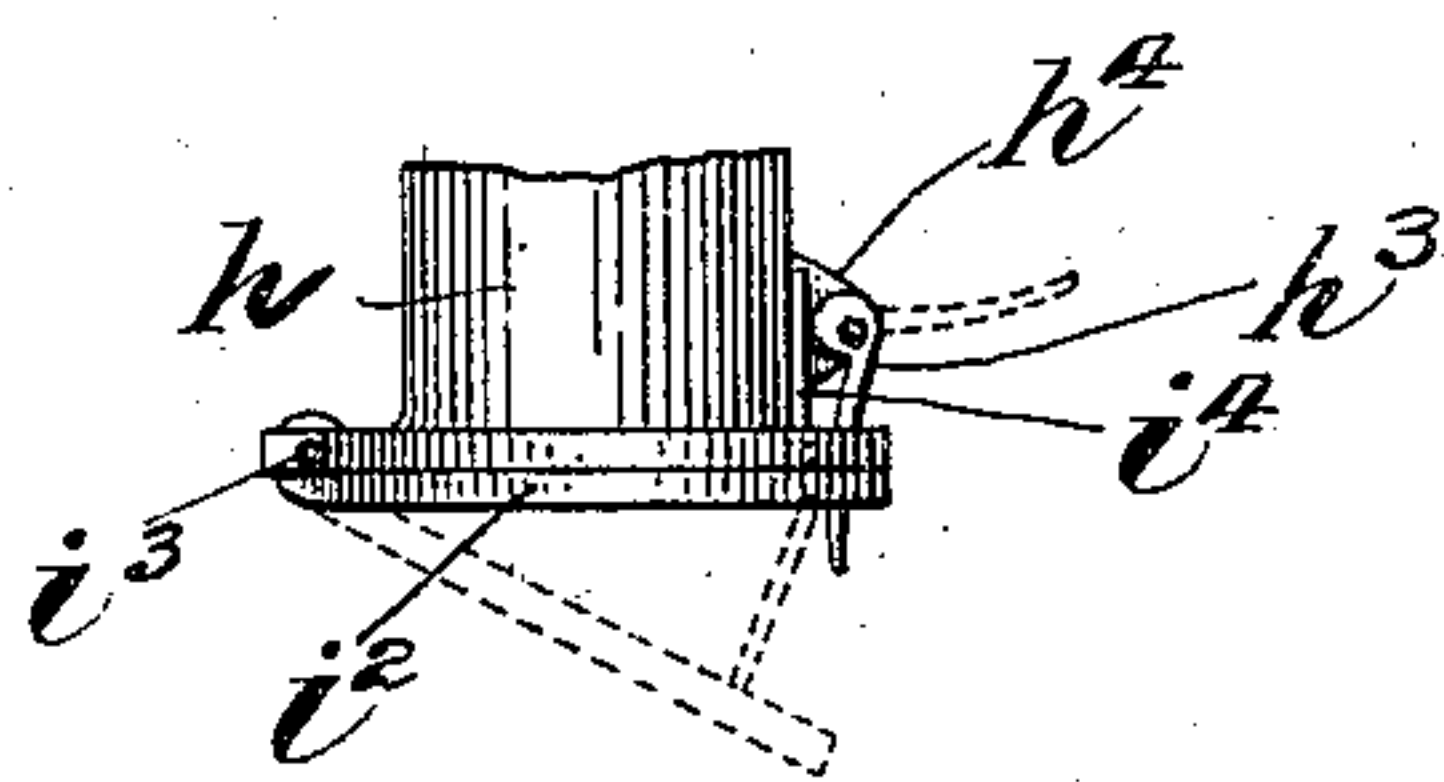
*Fig. 1.*



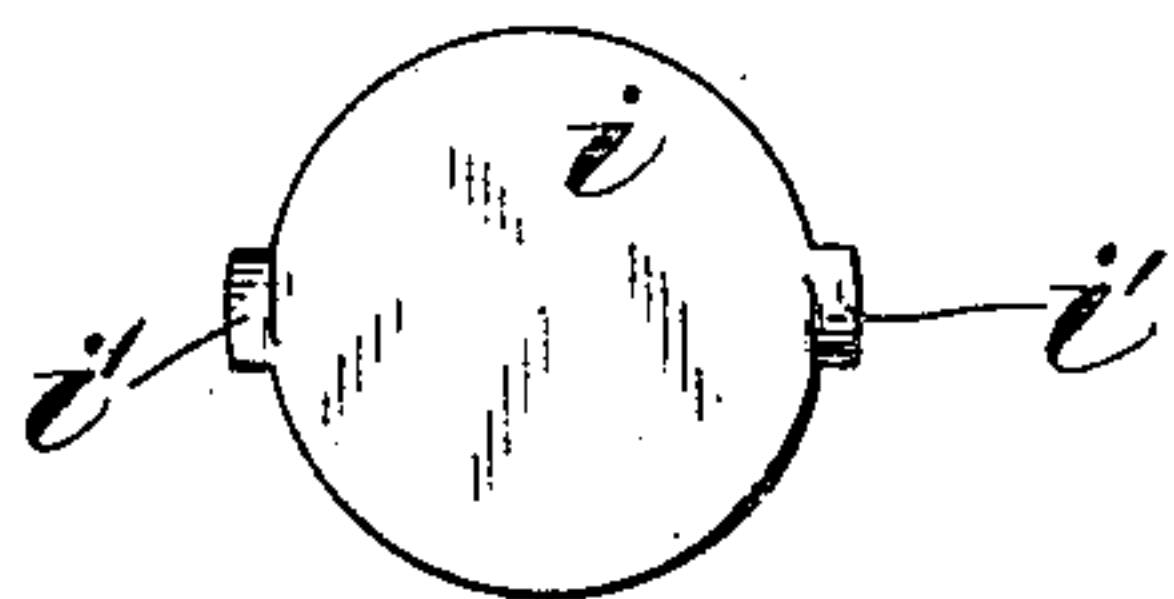
*Fig. 2.*



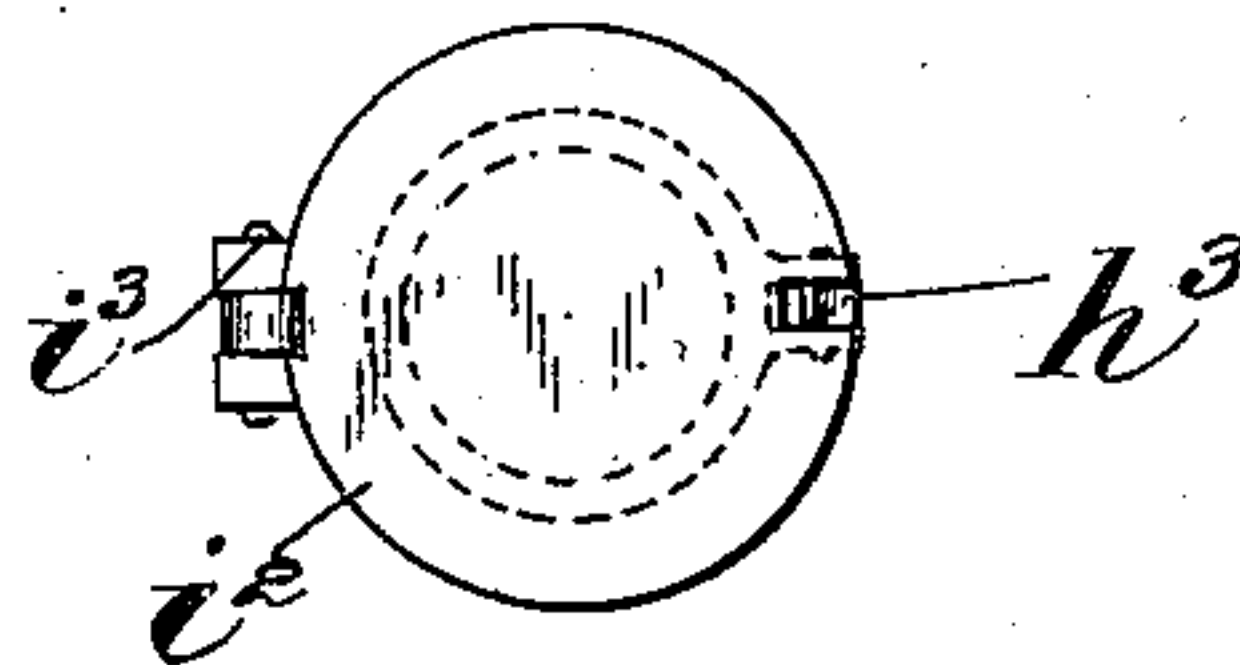
*Fig. 6.*



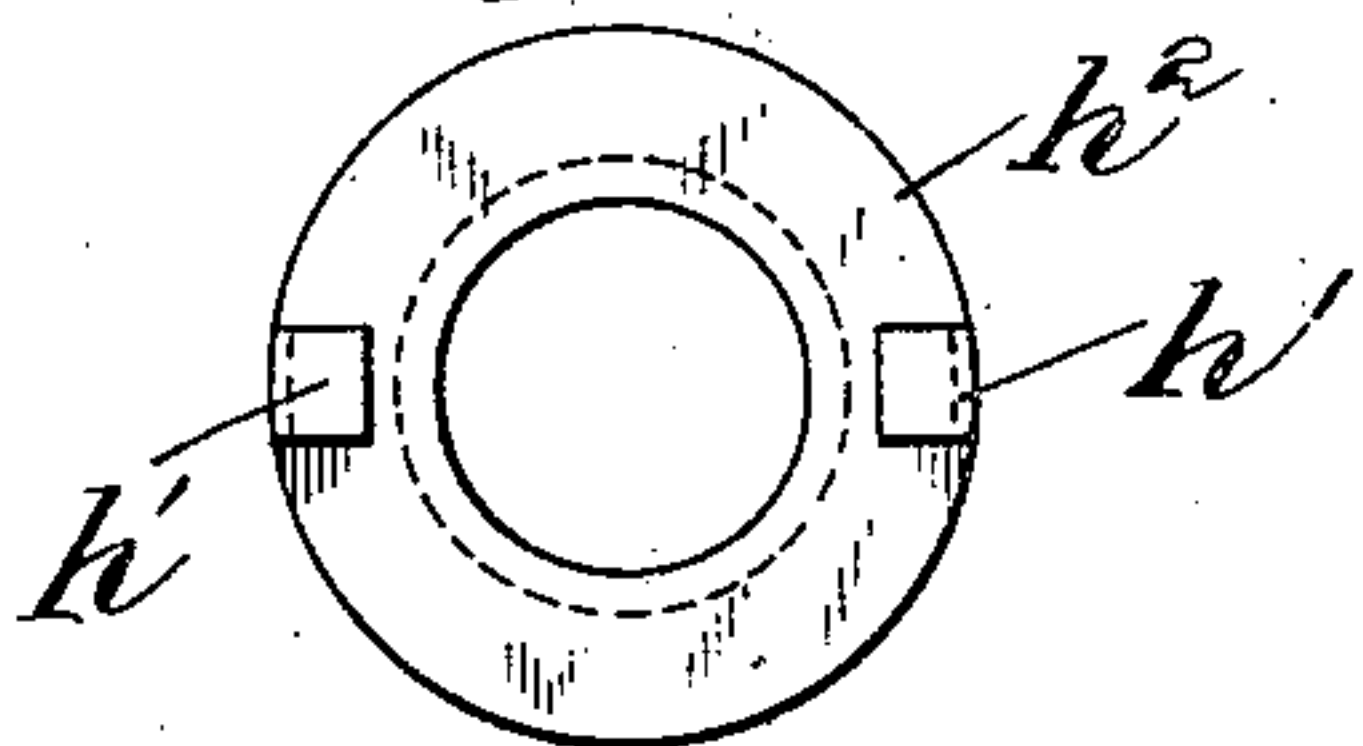
*Fig. 3.*



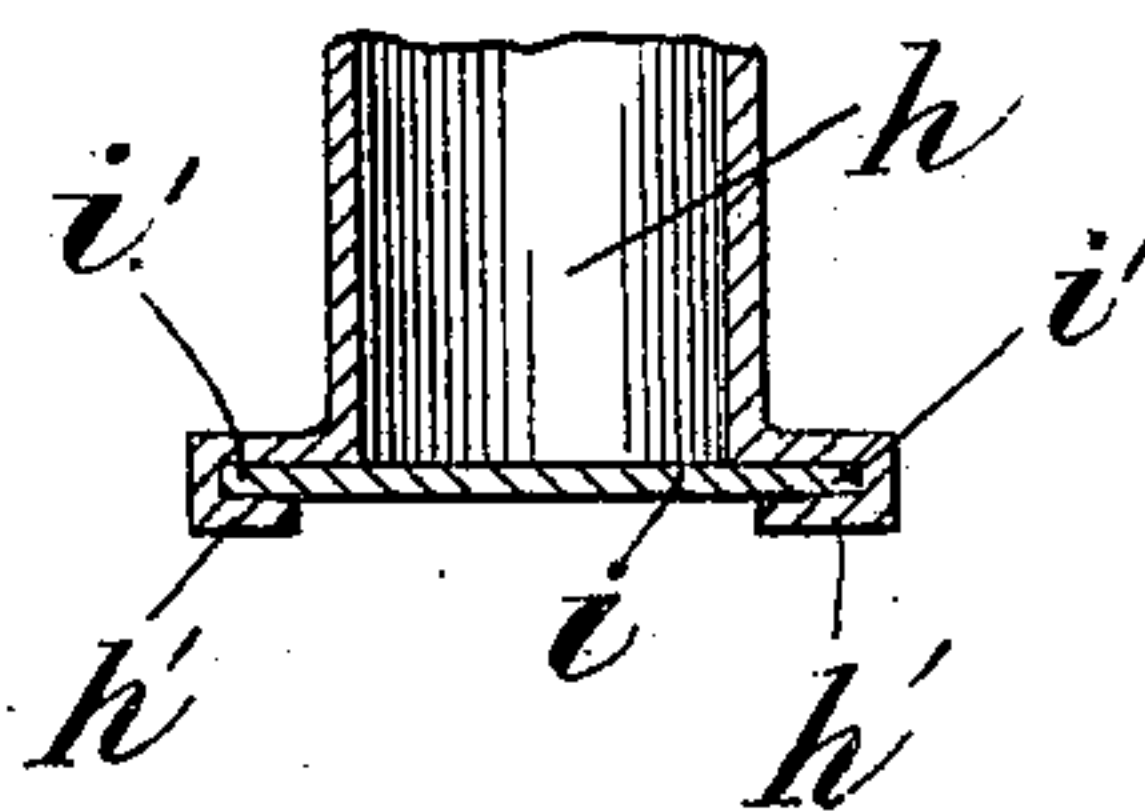
*Fig. 7.*



*Fig. 4.*



*Fig. 5.*



Attest:

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# UNITED STATES PATENT OFFICE.

JOHN E. WARD, OF NEW YORK, N. Y., ASSIGNOR TO WARD EQUIPMENT COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## VENTILATOR FOR RAILWAY-CARS, &c.

No. 886,558.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed October 22, 1907. Serial No. 398,562.

*To all whom it may concern:*

Be it known that I, JOHN E. WARD, a citizen of the United States, residing in the borough of Manhattan, of the city of New York, in the State of New York, have invented certain new and useful Improvements in Ventilators for Railway-Cars, &c., of which the following is a specification, reference being had to the accompanying drawing, forming a part hereof.

Ventilators of the so called "torpedo" and other similar types for railway cars are ordinarily so constructed and applied that the movements of the regulators therefor causes the discharge into the car of a greater or smaller quantity of dust and cinders which has accumulated above the regulator.

It is the object of this invention to so improve the construction of ventilators of the general type referred to, particularly with respect to the application thereof to the car, as to prevent the discharge of dust and cinders into the car, either when the regulator is moved, or at any other time, and to provide for the collection of such dust and cinders as may enter through the openings of the ventilator and for the discharge thereof outside of the car.

In accordance with the invention there is provided between the external ventilator openings and the opening into the car a dust collector in which such dust and cinders as enter the ventilator are collected, and there is provided for such dust collector a door which may be opened readily to discharge the dust and cinders outside of the car.

The invention will be more fully explained hereinafter with reference to the accompanying drawing in which it is illustrated, and in which—

Figure 1 shows, partly in section and partly in elevation, a ventilator of the so called "torpedo" type with the dust collector incorporated therewith and applied to a railway car, which is partly shown in outline. Fig. 2 is a view generally similar to Fig. 1, but showing in elevation a ventilator of another form. Fig. 3 is a detail plan view, on a larger scale, of the dust collector closing plate or door shown in Figs. 1 and 2. Fig. 4 is an underside view of the dust collector, illustrating the means for securing the plate or door thereto. Fig. 5 is a detail view of the dust collector in vertical central section showing the closing plate or door in position.

Fig. 6 is a detail view in side elevation, illustrating a different arrangement, of the closing plate or door. Fig. 7 is an underside view of the parts shown in Fig. 6.

The present invention is particularly applicable for use in connection with ventilators which have a vertical tube topped by a suitable cap to guard the openings through which the air passes into or out of the ventilator, but is independent of the particular form of such ventilator. Thus, in Fig. 1, it is shown as combined with a ventilator of the so called "torpedo" type, in which the vertical tube *a* is topped by a torpedo shaped cap *b* with openings *c* in the underside thereof which communicate through the body of the torpedo with the open upper end of the tube *a*, while in Fig. 2, it is shown as combined with a ventilator of the so called "globe" type in which the vertical tube *a'* is topped by a cap *b'*, raised above the open upper end of the tube *a'*, the opening being guarded by a ring *c'*. Either of these forms of ventilators or any other or usual or suitable form of the same general type may be employed with the dust collecting and discharging devices now to be described, being secured thereto by any suitable means, as by bolts through flanges, as indicated at *d* in Figs. 1 and 2, to the upper end of a vertical tube *e*, which is connected by a horizontal member *f* with the interior of the car through the vertical wall *g* of the raised portion of the roof. The vertical tube or member *e* of the elbow is extended below the horizontal member *f* to form a dust and cinder collector *h* into which such dust and cinders as may enter through the openings in the upper part of the ventilator are precipitated and in which they collect until they are removed. As will be observed, the dust collector *h* is entirely outside of the car, and to permit the removal from time to time of the dust and cinders which collect therein, it is provided with a closing plate or door *i* which can be readily opened or removed to permit the discharge of the accumulated dust and cinders outside of the car body.

As shown in Figs. 1—5, the closing plate *i* is provided with cam lugs *i'* to engage corresponding ears *h'* on the flange *h<sup>2</sup>* of the dust collector *h*. A partial turn of the plate or door *i* serves to disengage the plate from the collector to discharge the dust and cinders or to reengage it to close the collector. The closing plate may thus be removed and ap-

plied readily while permitting the dust collector *h* to stand well below the horizontal member *f* and close to the main portion of the car roof.

5 I claim as my invention:

10 The combination with a railway car having a roof with a raised portion and a vertical wall between the main roof and the raised roof, of a ventilator, an elbow pipe having its horizontal member projecting externally from the vertical wall of the car roof and having its vertical member extended below the horizontal member and close to the main

roof, the ventilator being secured upon the upper end of the vertical member and the flanged lower end of said vertical member having inwardly projecting ears, and a readily removable closing plate having cam lugs to engage said ears. 15

This specification signed and witnessed this 19th day of October, A. D., 1907. 20

JOHN E. WARD.

Signed in the presence of—  
W. B. GREELEY,  
AMBROSE L. O'SHEA.