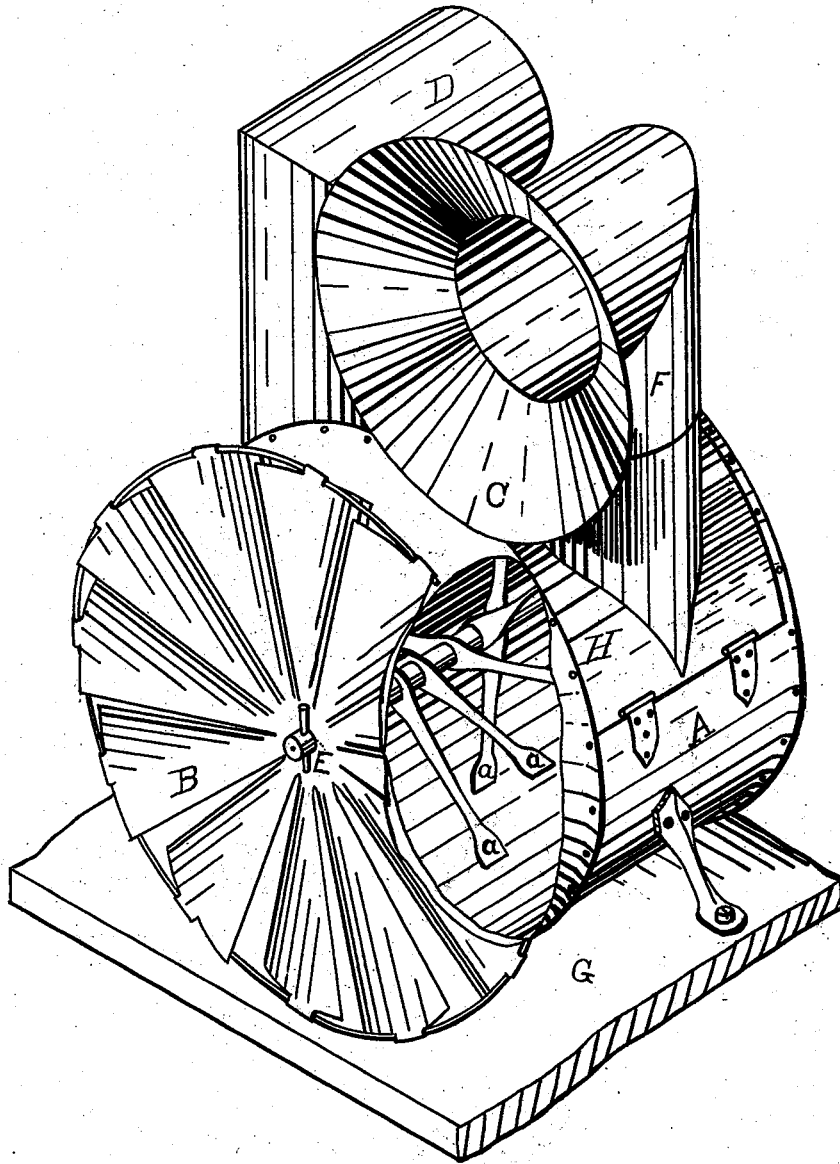


H. S. NEWBERRY.
Car-Ventilator.

No. 209,914.

Patented Nov. 12, 1878.



Witnesses:

Oscar Baker
Warren Seely

Henry S. Newberry, Inventor,

By

Geo. C. Tracy & Co., Attorneys.

UNITED STATES PATENT OFFICE.

HENRY S. NEWBERRY, OF CLEVELAND, OHIO.

IMPROVEMENT IN CAR-VENTILATORS.

Specification forming part of Letters Patent No. **209,914**, dated November 12, 1878; application filed April 29, 1878.

To all whom it may concern:

Be it known that I, HENRY S. NEWBERRY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Car-Ventilator; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The object of my invention is to provide a device for ventilating railroad-cars and purifying the air which enters through the ventilator, so as to prevent the admission of dust, cinders, &c. The device is especially intended for application to steam-cars; but by suitable modification of the general principle it may be adapted to other situations where a device of the kind is desired.

In the drawing is shown a view of my machine, with a portion broken away from the side to exhibit interior arrangement.

A is a cylindrical receptacle; B, a windmill, mounted upon the shaft E. C is an expanded mouth of the elbow and pipe F. D is the exit-pipe, by which the air is conveyed into the car.

In operation, the receptacle A is about one-third filled with water, the device being attached by suitable braces to the roof of the car, as represented at G. The windmill B is set in motion by the momentum of the car, as the air is forced thereby with greater velocity against it, actuating the shaft E, and forcing the paddles *a a* through the water in such a manner as to transform it into spray. At the same time air enters through the expanded mouth C and pipe F, and, passing through the cylindrical body A, must, to reach the outlet D, be carried through the water or spray, necessarily removing cinders and dust, and allowing only purified air to enter the car.

The simplicity of construction of my machine obviates liability to become broken or

out of order, and decreases cost of construction.

The elbow D may be turned in any direction to convey the air by suitable connection thereto to any part of the car. The portion H of the receptacle A, to which the pipe F is attached, is hinged upon the other portion, permitting access to the interior when desired.

The machine may be arranged with an automatic connection with a tank, to keep the water within the cylinder at a uniform height.

In attaching it to steam railway-cars, I propose to place one upon the roof at the right or left side of both ends of the car, with suitable connection with the inside, in such a manner that a draft will be generated and the machine made to operate when the car is moving in either direction.

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

The car-ventilator described, composed of a cylindrical metallic reservoir, A, directly attached to the roof of a car, and having hinged door H, the pipe-elbow F, with expanded mouth C, connected to the hinged door H, the wind-wheel B, having its face presented toward the end of the car, in the same direction as the expanded mouth C, and mounted on the end of the shaft E, the revolving paddles or beaters *a*, arranged at different angles in such receptacle, and having the shaft E passing through the middle of each, and the escape-pipe D, all constructed, arranged, and operated substantially as and for the purpose set forth.

This specification signed and witnessed this 15th day of February, 1878.

H. S. NEWBERRY.

Witnesses:

EDW. S. TRACY,
OSCAR BALZER.