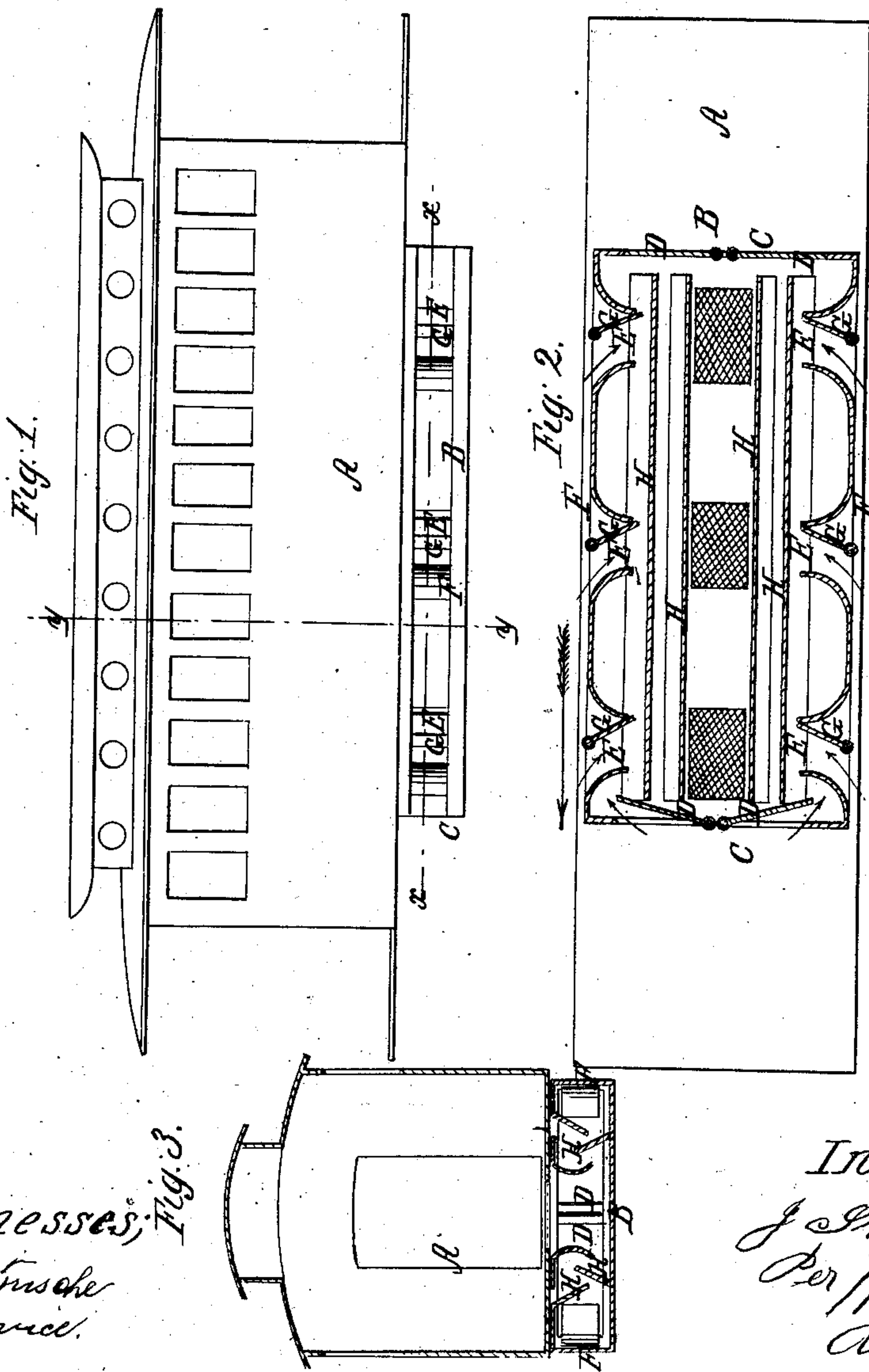


J. Shaw

Car Ventilator

N^o 69847.

Patented Oct. 15, 1867.



Witnesses;
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JEHYLEMAN SHAW, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 69,847, dated October 15, 1867.

VENTILATING ATTACHMENT FOR RAILROAD CARS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JEHYLEMAN SHAW, of Bridgeport, in the county of Fairfield, and State of Connecticut, have invented a new and useful Improvement in Ventilating Attachment for Railroad Cars and other land conveyance; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a railroad car, having my improved ventilator applied thereto.

Figure 2, a transverse vertical section, taken in the plane of the line $y y$, fig. 1; and

Figure 3, a horizontal section, taken in the plane of the line $x x$, fig. 1.

Similar letters of reference indicate like parts.

The present invention consists in providing the bottom of a railroad car or other land conveyance with a box or chamber, having openings along both of its sides and ends, with those upon its sides of an inward-projecting, tubular, or tunnel shape. Each and all of these openings are provided with a lid or door, so hung thereto as to swing and open the said openings according to the direction in which the car is moving, and thus to admit air to the box or receptacle, from which it passes up through the bottom, and thus enters the interior of the car; the said box or receptacle being provided with deflector-plates suitable for preventing too strong and direct an air-draught into the car, and, if so desired, with a water-box or reservoir, or reservoirs, for relieving the air from all dust, &c., which may be mixed with it.

A, in the drawings, represents a railroad car, which may be of any of the ordinary constructions, both upon its inside and outside. B, a box or receptacle, applied or attached to the under side of the bottom of a railroad car, along which it extends for a portion of its length, its width either more or less, as may be deemed necessary. The two ends C of the box are open, and in such openings lids D are hung, two to each opening, so as to open or swing inward and toward each other. E, openings in sides F of box B, three openings to each side, each of which is made of an inward-projecting, tubular, or funnel shape, and each having a lid or partition-plate G, so hung in them as to swing across from one side to the other of the openings, according to the direction in which the car is moving, and thus open them to the free passage of air to the interior of the box B. H, partitions or plates upon inside of air-box B, along which they extend from one end to the other, which plates serve to deflect the air passing in at the side and end openings of the box, and to thereby relieve it of a great proportion of its force before entering the car, through suitable registers I, in the bottom of the same. Within the box B water-reservoirs or basins may be arranged, suitable for the air, in passing through the box to the interior of the car, to deposit what dirt, dust, &c., may be mixed with and carried by the air into the box, and thus to purify as well as to cool it before entering the car itself.

With a ventilator attachment of the construction hereinabove described, and shown in the plate of drawings forming a part of this description, it is plain to be seen that, in whatever direction the car may be moving, whether forward or backward, the lids to the openings of the box will open or close such openings in the proper direction for the air to pass into the box, and from thence to the interior of the car; the lids being self-operating, or, in other words, operated by the current of air through which the car is moving.

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

The ventilator, constructed as described, consisting of the box B, having the pivoted lids D in the ends C, opening inward against the ends of the inclined partition-plates H, the sides F provided with the funnel-shaped or tubular openings E, in which the pivoted, inward-projecting partitions G work, all arranged and operated as herein shown and described for the purpose specified.

JEHYLEMAN SHAW.

Witnesses:

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