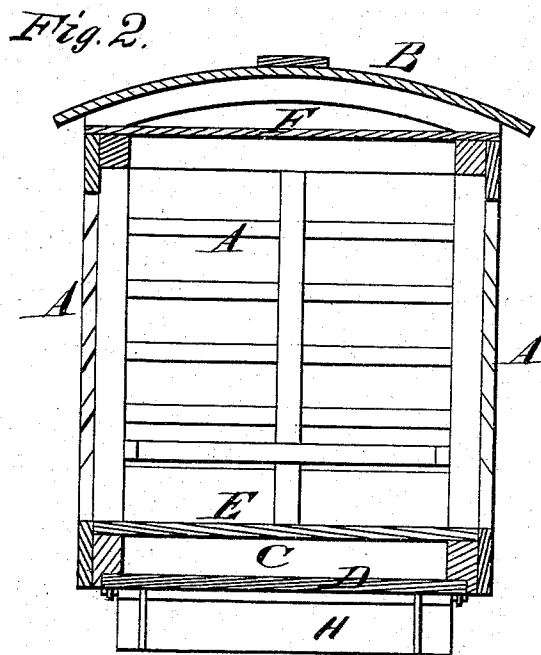
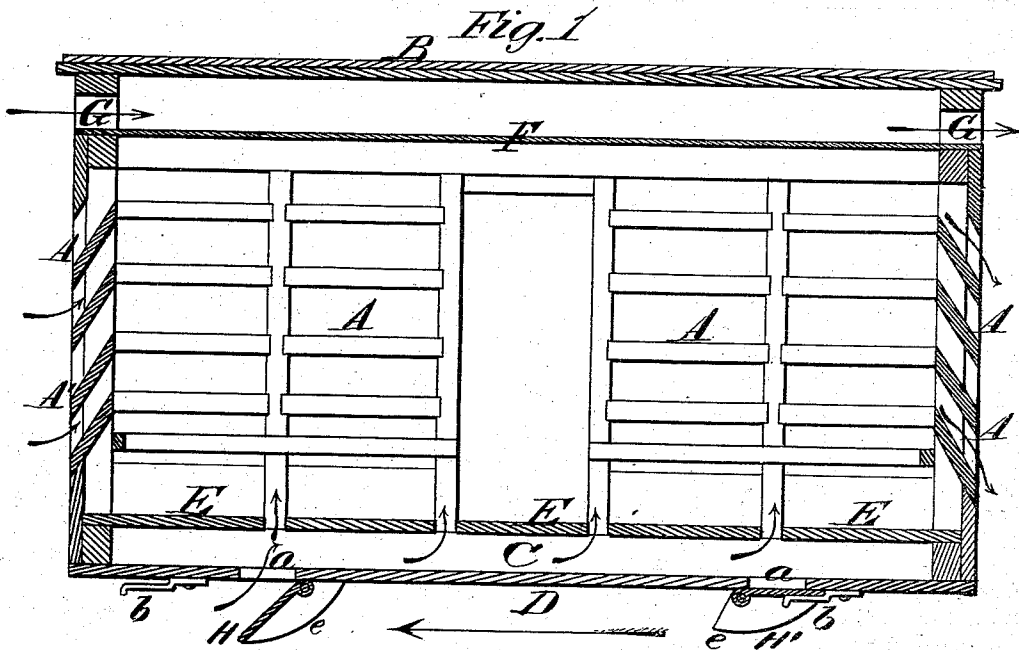


S. L. LATTA.
Ventilating Cars.

No. 156,706.

Patented Nov. 10, 1874.



WITNESSES
E. H. Bates
Robert Everett

INVENTOR
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UNITED STATES PATENT OFFICE

SAMUEL L. LATTA, OF LIGONIER, INDIANA.

IMPROVEMENT IN VENTILATING CARS.

Specification forming part of Letters Patent No. **156,706**, dated November 10, 1874; application filed October 10, 1874.

To all whom it may concern:

Be it known that I, SAMUEL L. LATTA, of Ligonier, in the county of Noble and State of Indiana, have invented a new and valuable Improvement in Ventilating Cars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal section of my car, and Fig. 2 is a transverse sectional view of the same.

This invention has relation to means for ventilating and cooling transport-cars without the use of ice; and it consists in a car having slatted sides and ends, a double roof, which is open at both ends, and a double floor, combined with air-gatherers, which are hinged to the bottom wall of the floor, and arranged so that air will be forcibly induced into the car while in motion, as will be understood from the following description.

In the annexed drawings I have represented a car having slatted sides and ends, the slats A forming which are inclined in such manner that, while they allow a free circulation of air between them, they will prevent water from entering the car.

B designates the roof of the car, which is arched transversely over a space formed by a horizontal ceiling, F, which space is supplied with currents of air, when the car is in motion, through end openings G G. The floor of the car is composed of boards E, which are separated so as to leave narrow spaces between them, through which air ascends, as indicated by the arrows in Fig. 1. Below the floor E is an air-space, C, which is formed by a false bottom, D, into which space air enters through

transverse openings *a a*, located near the ends of the car. H H' designate wind-gatherers, which are narrow blades, that are hinged along the edges of the openings *a a*, and provided with back-stops *e e*, and also with fastenings *b b*.

When the car is moving in the direction indicated by the arrow beneath it, the blade H is opened, and the blade H' is shut; and when the car is moving in the opposite direction, blade H' will be opened, and blade H shut. These blades gather large quantities of air, and forcibly introduce it into the chamber C, and thence into the car through openings between the floor-boards E.

The object of the slatted walls is to allow air to pass into, through, and out of the car in a continuous stream, thus keeping the contents dry, and imparting to them all the cooling effects which are to be derived from air in motion, at the same time shutting out sun and rain.

The open floor, the air-chamber beneath it, and the air-gatherers, and also the air-chamber of the roof, are intended to greatly increase the ventilation and cooling of the car.

What I claim as new, and desire to secure by Letters Patent, is—

A transport-car having slotted sides and ends, an air-passage between its roof B and ceiling F, an open-floor air-space, C, bottom D, openings *a a*, and air-gatherers, all combined in the manner and for the purposes described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SAMUEL L. LATTA.

Witnesses:

D. W. GREEN,
H. JEANNERET.