

J. S. LINSLEY.

CAR-HEATER.

No. 186,739.

Patented Jan. 30, 1877.

Fig. 1.

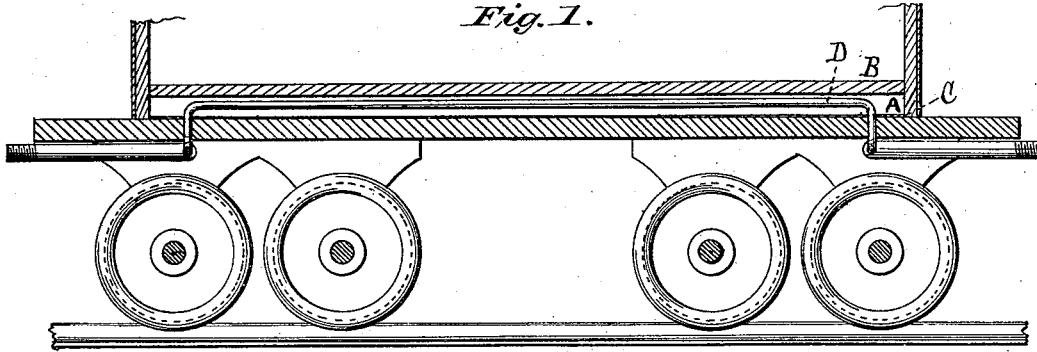


Fig. 2.

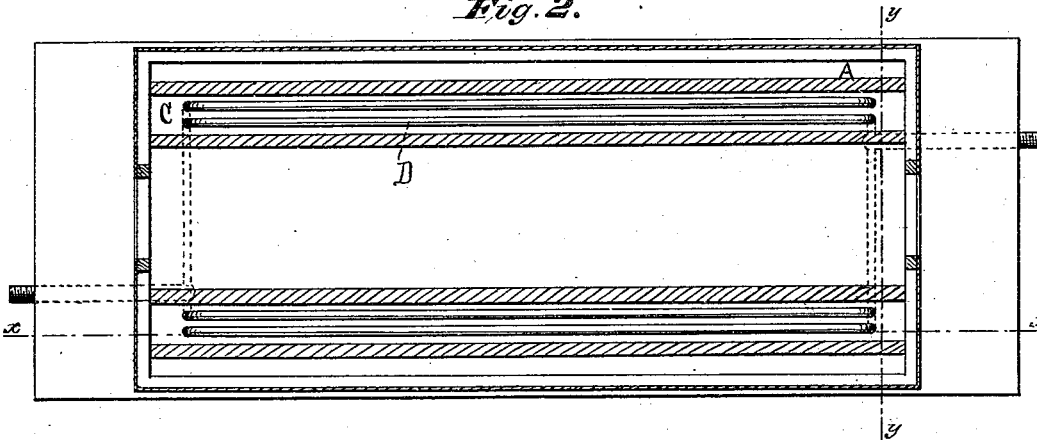
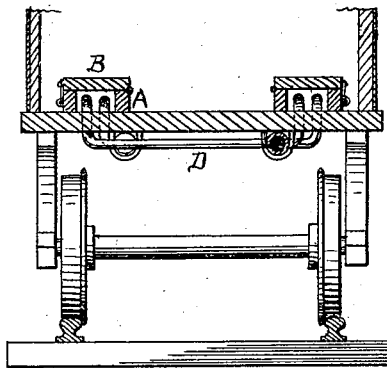


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN S. LINSLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN CAR-HEATERS.

Specification forming part of Letters Patent No. 186,739, dated January 30, 1877; application filed December 13, 1876.

To all whom it may concern:

Be it known that I, JOHN S. LINSLEY, of the city of New York, county of New York, State of New York, have invented certain new and useful Improvements in the Mode of Warming Railroad-Cars, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section on the line *x x*, Fig. 2. Fig. 2 is a top-plan view, the floor or pavement being removed. Fig. 3 is a cross-section on the line *y y*, Fig. 2.

The nature and objects of my invention relate to the proper distribution of heat in a railroad-car, so as to insure the comfort of the passengers or occupants of such car, and also economize the use of fuel.

The principle of my invention consists in the application of heat to the feet by slow radiation through the medium of a substance that receives and imparts heat slowly, as hard wood, soap-stone, tile, or concrete, &c.

My invention is designed to be used in combination with the invention fully described in Letters Patent for ventilating, warming, and cooling railroad-cars, No. 186,012, issued to me January 9, 1877.

When the feet are properly warmed, the healthful temperature of the body is maintained, the blood circulates equally, and a pleasurable comfort is experienced.

I am aware that attempts have been made to warm the feet by passing coils along the side of a car, or near the floor of the same, or in boxes perforated for the transmission of hot air in fine streams against the feet.

Now, the object of my invention is essentially different from any hitherto attained; for it is a well-known fact that currents of hot or cold air impinging in sheets or fine streams, and with more or less force, against the feet are positively injurious to and hazardous to the health of the passenger, as well as being a continual discomfort.

It is my object to avoid the introduction of hot or cold air near the feet, and, instead, to transmit the requisite degree—say 98° Fahrenheit, or as may be desired—of heat slowly, gently, and uniformly upward against the soles of the feet, thereby securing the greatest

comfort and economy from a given amount of fuel.

These objects are secured by a foot-warming box, which is constructed upon the floor of a car, and beneath the chairs or seats, in such a manner that the passenger or occupant of such car can conveniently rest the feet upon such box.

The foot-warming box may be made of blocks or planks of hard wood or a metallic or wooden frame, supporting a floor or pavement of blocks of hard wood, soap-stone, tile, concrete, or any suitable material that shall radiate heat slowly.

The heat is applied to the floor or pavement by means of coils for hot water, steam, or hot air. Beneath the coil may be placed a sheet of polished zinc or other non-radiant substance, to prevent waste of heat from downward radiation.

The construction and operation of my invention are as follows: A is the frame, which may be made of wood, iron, or any other suitable material. The bottom of this frame A may be provided with a zinc floor, or other non-radiant lining, C. D D are coils of pipe, which are supplied, by any suitable means, with either steam, hot air, or hot water. These coils of pipe are located within the frame A. B is the pavement or floor, which rests upon the top of the frame A. This pavement or floor is constructed out of any material that will radiate heat slowly, such as blocks of hard wood, soap-stone, tile, or concrete.

This foot-warming box is designed to complete the system of ventilating, warming, and cooling railroad-cars embraced in Letters Patent referred to, and contemplates the use of the usual forms of heating apparatus. The heat is to be divided about equally, or as may be desired, between the foot-warming box and the tempering-chambers referred to and described in the previously-mentioned Letters Patent, thereby allowing a sufficient amount of heat to maintain the healthful temperature of the body, while at the same time securing a proper temperature of the air to allow of thorough ventilation.

What I claim as my invention is—

1. In a foot-warming box for a railroad-car,

the frame A, pavement B, constructed as described, and coils D, the whole combined and arranged to operate substantially as and for the purpose specified.

2. In a foot-warming box for a railroad-car, the frame A, pavement B, coil D, and zinc bottom, or other non-radiant lining, C, the

whole combined and arranged to operate substantially as described.

JOHN S. LINSLEY.

Witnesses:

KIMBALL C. ATWOOD,
MARY W. LINSLEY.