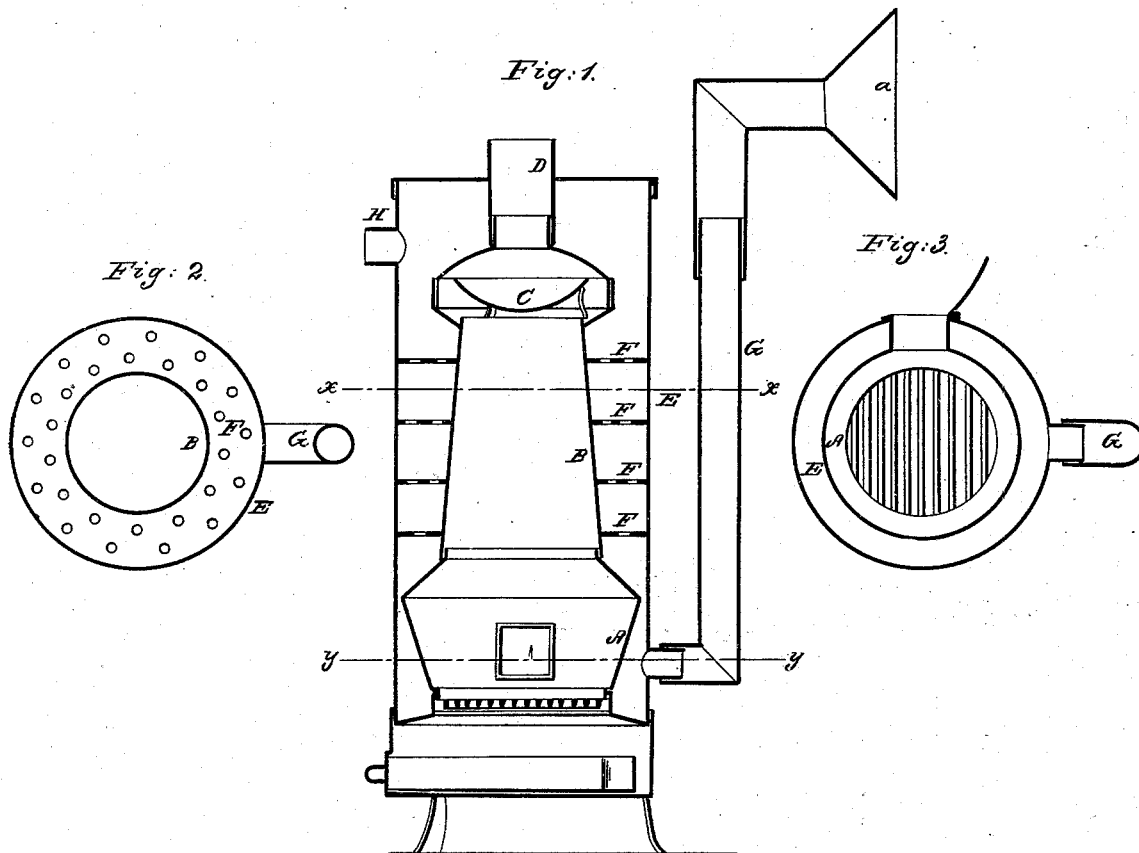


H. G. DAYTON.
Stove for Railroad Cars.

No. 54,872.

Patented May 22, 1866.



Witnesses:
J. W. B. Lovington
Wm. Freuden.

Inventor:
H. G. Dayton.
Per Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

H. G. DAYTON, OF MAYSVILLE, KENTUCKY.

STOVE FOR RAILROAD-CARS.

Specification forming part of Letters Patent No. 54,872, dated May 22, 1866.

To all whom it may concern:

Be it known that I, H. G. DAYTON, of Maysville, in the county of Mason and State of Kentucky, have invented a new and Improved Stove for Railroad-Cars; 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 a part of this specification, in which—

Figure 1 represents a vertical central section of this invention. Fig. 2 is a horizontal section taken in the plane indicated by the line *x x*, Fig. 1. Fig. 3 is a similar section, the line *y y*, Fig. 1, indicating the plane of section.

Similar letters of reference indicate like parts.

This invention relates to a stove which is intended particularly for railroad-cars, but which can also be used for steamboats or for apartments in buildings. It is composed of an inner fuel and combustion chamber, which is surrounded by an air-jacket, to which the cold external air is admitted through a suitable pipe near its base. The annular space between the air-jacket and combustion-chamber of the stove is occupied by a series of perforated flanges, so that the cold air, in passing up through said annular space, is brought in contact with an extended radiating-surface, and its temperature is thereby raised to a high degree before it is permitted to escape into the car or apartment to be heated.

A represents the fuel-pot of my stove, which is made of sheet metal or any other suitable material, and which may be lined with fire-brick and provided with a grate of any desirable construction. From the top of this fuel-pot

rises the combustion-chamber B, which is made cylindrical or slightly tapering, and which is surmounted by the curved deflecting-plate C, which prevents the products of combustion from rushing out through flue D in a direct course, and compels the same to remain in the combustion-chamber long enough to heat the same to a high temperature.

This stove is surrounded by an air-jacket, E, which is made of sheet metal or any other suitable material, and the annular space between this air-jacket and the combustion-chamber is occupied by a series of perforated flanges, F.

G is the air-supply pipe, which enters the jacket E near its base and which rises up to any desirable height. It is provided with a bell-shaped mouth, *a*, which can be turned according to the direction in which the car moves, so that by the motion of the car itself the cold air is forced down and into the air-jacket.

By the perforated flanges F the radiating surface of my stove is materially increased, and the air, in passing through the holes in said flanges, is heated to a high temperature. When heated it discharges through the pipe H into the car or space to be heated.

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

The arrangement of the flanges F, the combustion-chamber B, air-jacket E, and pipe G, substantially as and for the purpose described.

The above specification of my invention signed by me this 11th day of January, 1866.

H. G. DAYTON.

Witnesses:

M. M. LIVINGSTON,
W. HAUFF.