

M. W. HAZELTON.
HEATERS FOR CARS, &c.

No. 181,437.

Patented Aug. 22, 1876.

Fig. 1

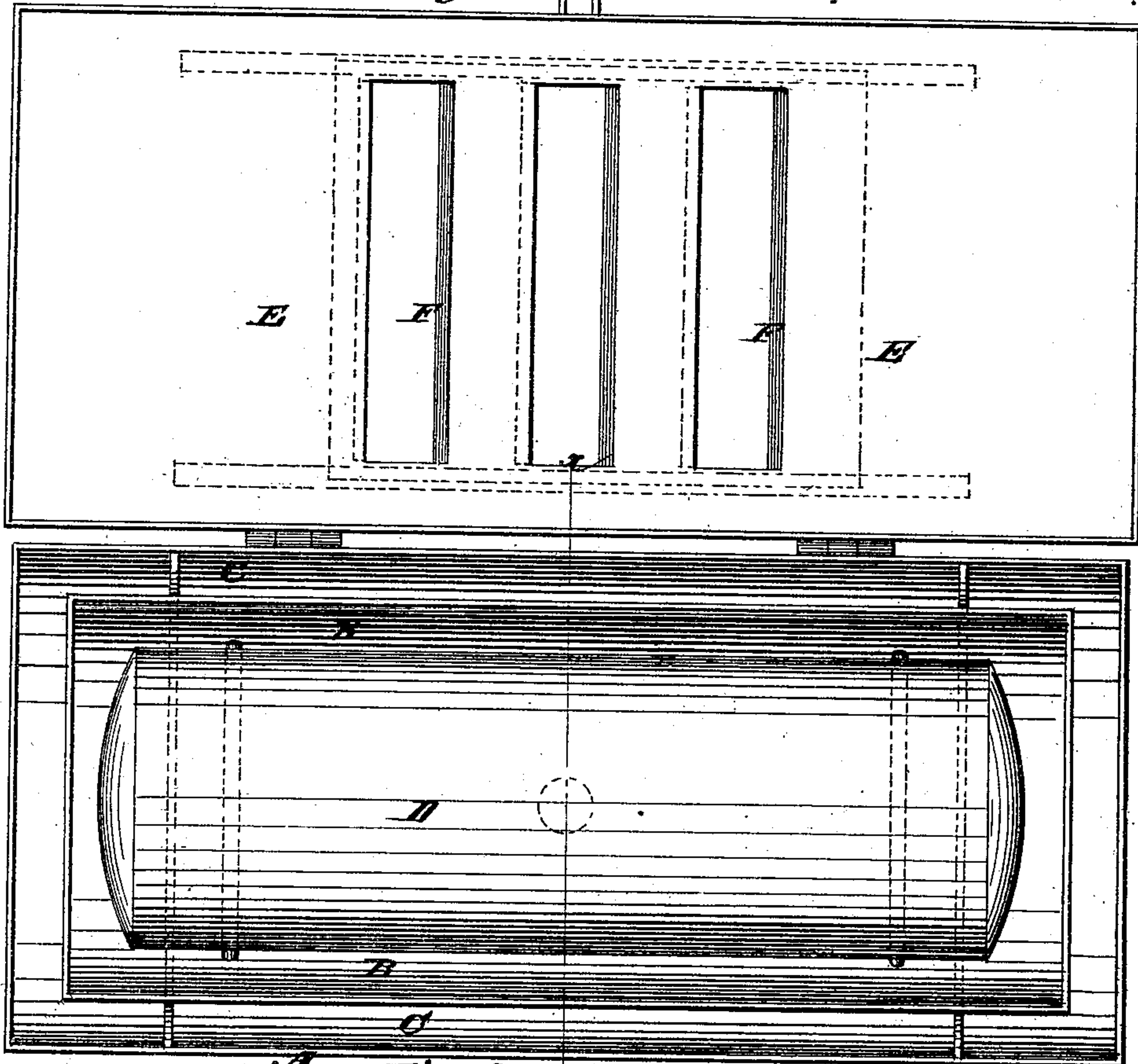
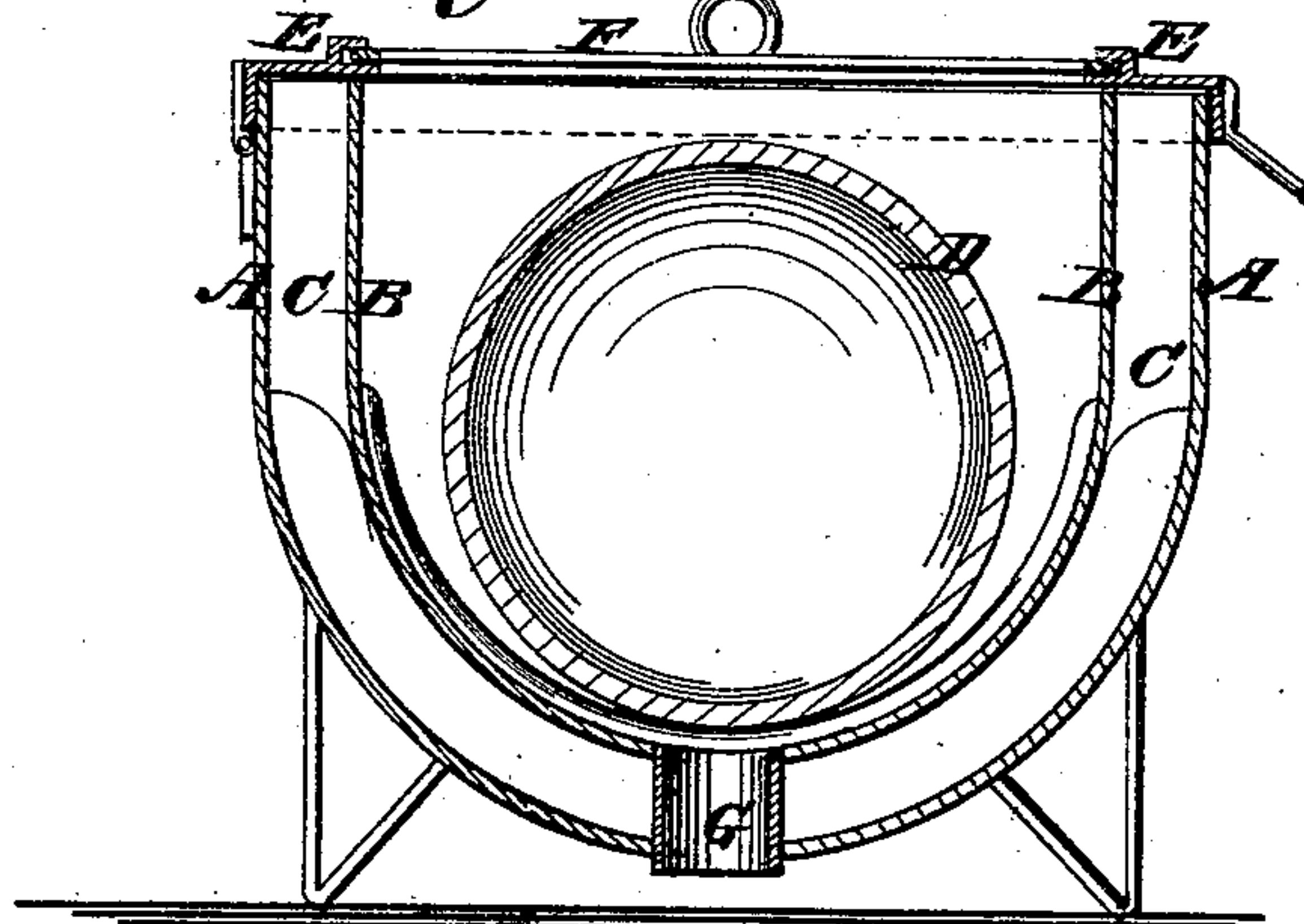


Fig. 2



WITNESSES:

Charles McCordle.
John Goethals

INVENTOR:

M. W. Hazelton

BY

Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

MILTON W. HAZELTON, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF
AND ANSON W. EGGLESTON, OF SAME PLACE.

IMPROVEMENT IN HEATERS FOR CARS, &c.

Specification forming part of Letters Patent No. **181,437**, dated August 22, 1876; application filed
June 20, 1876.

To all whom it may concern:

Be it known that I, MILTON W. HAZELTON, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Heater for Cars and other carriages and rooms, of which the following is a specification:

My improved heater consists of two cases of metal or other suitable substance, placed one within the other, so as to form a space between them, except at the top, which is filled with asbestos or other non-conducting material, and is charged with hot-balls or other form of metal, for heating the car or other room by radiating the heat contained in the said objects, and in the top of the heater is a register, and in the bottom an opening for allowing the air to flow in to be heated and be discharged at the top, by which the heat may be given off more or less rapidly according to the volume of air allowed to pass, which can be regulated at will by the register. The register may be in the inlet-passage at the bottom, if preferred.

This improved heater is designed mainly for cars and carriages; but it may also be used for heating rooms temporarily in hotels. The hot-balls will be supplied to the cars at the stations, and may be introduced through a door in the top or side, as preferred.

For street-cars the heater will preferably stand on the floor like a stove; but for railway-cars it may be let down from the floor,

and the balls may be put in at one side or end under the floor of the car.

Figure 1 is a top view of my improved heater, with the cover raised; and Fig. 2 is a transverse section taken on line *xx* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the outer case; B, the inner one; C, the space between them to be filled with asbestos; D, the heating-cylinder or other form of metal, to be heated in a furnace at the station, and be put in hot. E is the cover of the heater, which in this case contains the register F, and G is the inlet for air at the bottom of the heater. The heat generates an active current of air from below, which takes up the heat and carries it off into the room more or less rapidly, according to the size of the openings to be regulated by the register, by which they will be graduated according to the heat of the cylinder D, or other piece or pieces employed for the purpose.

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

The double case A B, having asbestos filling C, inlet G, and register F, and a heater, D, combined and arranged substantially as described.

MILTON W. HAZELTON.

Witnesses:

S. C. WELCH,
ANSON W. EGGLESTON.