C. SANBORN.

Car Heater.

No. 92,753. Patented July 20, 1869.

Fig. 1.

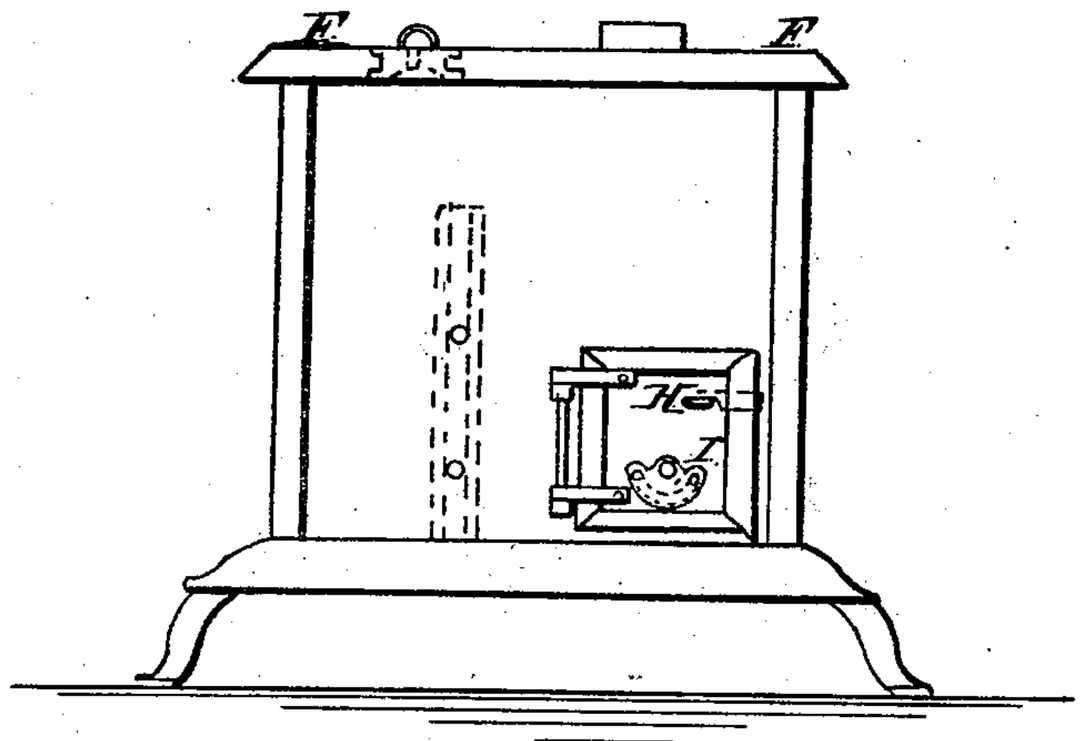
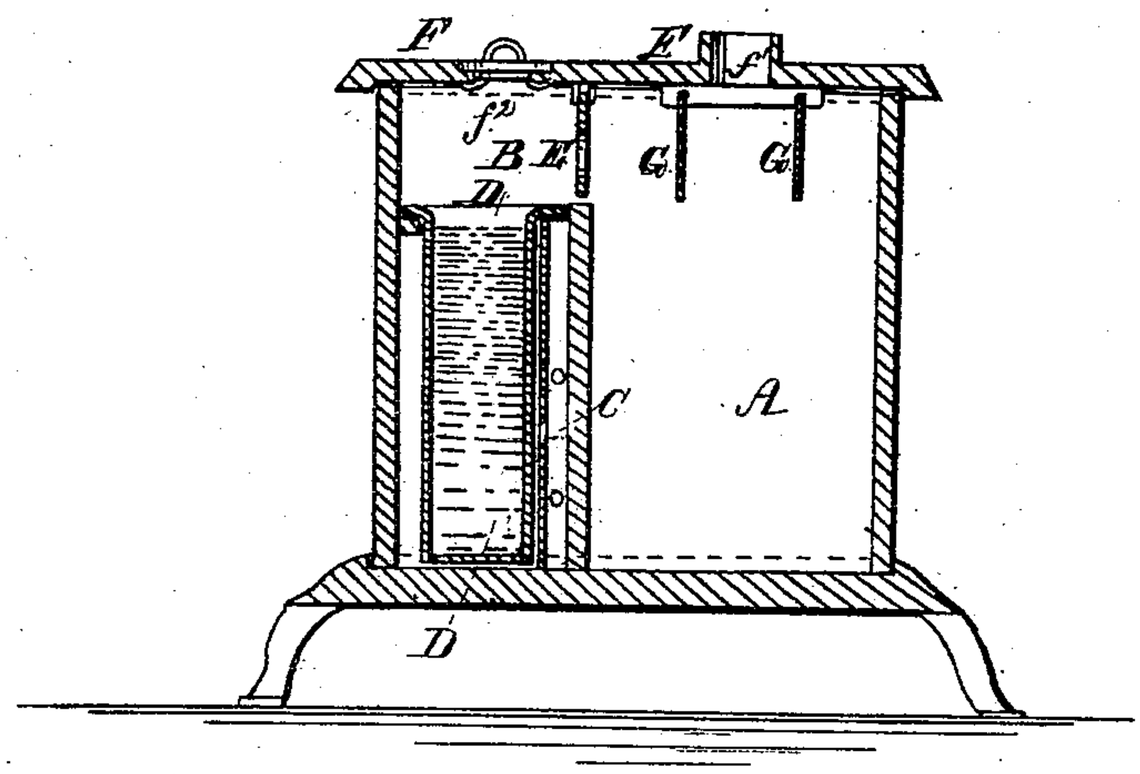


Fig. 2.



Witnesses
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CYRUS SANBORN, OF CHICHESTER, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF AND BENJAMIN F. LEAVITT, OF SAME PLACE.

Letters Patent No. 92,753, *dated July* 20, 1869.

RAILROAD-CAR HEATER.

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, CYRUS SANBORN, of Chichester, in the county of Merrimack, and State of New Hampshire, have invented a new and improved Safety-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 part of this specification, in which—

Figure 1 is a front view of my improved stove.

Figure 2 is a vertical cross-section of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved railroad-stove, which shall be so constructed and arranged, that should the car or stove be accidentally overturned, the fire may be extinguished before it can do any damage, and which shall at the same time be simple in construction, and will occupy small space in the car; and

It consists in the construction and combination of the various parts of the stove, as hereinafter more fully described.

The body of the stove, which may be of any desired form or size, is divided into two compartments, A and B, by the partition C.

The partition C is made double, the space between its walls communicating freely with the air outside of the stove, through holes in the sides of said stove, as shown in figs. 1 and 2.

The compartment A is the fire-chamber, which is arranged in the manner of an ordinary fire-chamber.

D is a water-tank, or reservoir, which is so formed as to fit into the compartment B, and is provided with outwardly-projecting flanges around its upper edge, which rest upon and are secured to flanges formed upon the sides of the stove, and upon the top of the partition C.

The reservoir D is made a little smaller than the compartment B of the stove, so that an air-space may be left all around said reservoir D, to prevent the water in said reservoir from being heated, the air-chamber in the partition C also tending to prevent the water in said reservoir from being heated.

The partition C does not extend to the top of the stove, the space above the upper edge of said partition being occupied by a plate, or valve, E, pivoted at the upper ends of its end edges, to the body of the stove, so as to prevent the smoke and other products of combustion from passing into the compartment B.

The plate E is pierced with a hole, to allow any steam that may be developed from the water in the reservoir D, to escape into the compartment A, and pass off with the products of combustion.

F is the top plate of the stove, through which is formed an opening, f^1, for the escape of the products of combustion, and which is provided with a pipe-collar to receive the smoke pipe.

To the under side of the top plate F of the stove, upon the opposite sides of the egress-opening for the smoke, are pivoted two swinging plates or valves G, as shown in fig. 2, so that should the stove be overturned in any direction, one or the other of said plates or valves may drop down over and close the said opening.

In the top F of the stove, directly over the reservoir D, is formed an opening, f^2, for convenience in supplying said reservoir with water when required.

The opening f^2 should be covered with a screw, or other lock-cap.

H is the door, through which the fuel is introduced into the fire-chamber, which door should be supplied with a draught-opening, which is closed with a damper, I, so constructed and weighted, that when the stove is in its proper position, it will remain either open or shut, but should the stove be overturned, the said damper, from its own weight, will close the draught-opening.

By this construction, should the stove or car be overturned in any direction, the water from the reservoir D will flow into the compartment A, and extinguish the fire before it can do any damage, the valves G and damper I at the same time closing the smoke and draught-openings, so that neither fire nor water can escape until the fire has been extinguished.

Having thus described my invention,

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

An improved stove, divided into two compartments, A and B, by the double-walled partition C, and provided with a water-reservoir, D, and the pivoted plates or valves E G, said parts being constructed and operating in connection with each other, substantially as herein shown and described, and for the purpose set forth.

CYRUS SANBORN.

Witnesses:

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