H. TANNER.

CASINGS FOR CAR STOVES.

No. 190,929. Patented May 15, 1877.

Fig. 1.

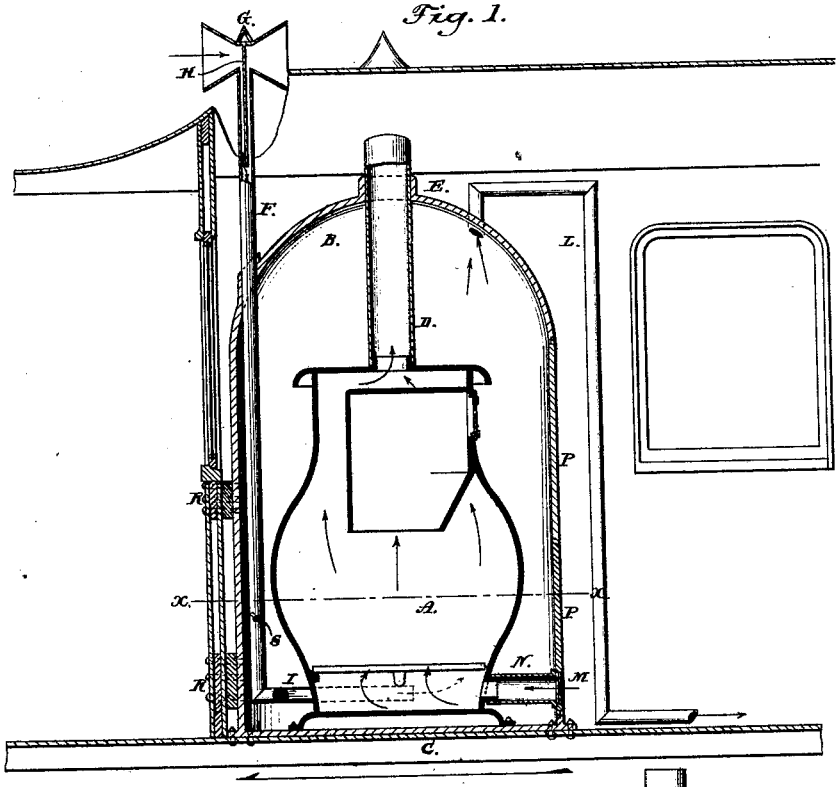


Fig. 2.

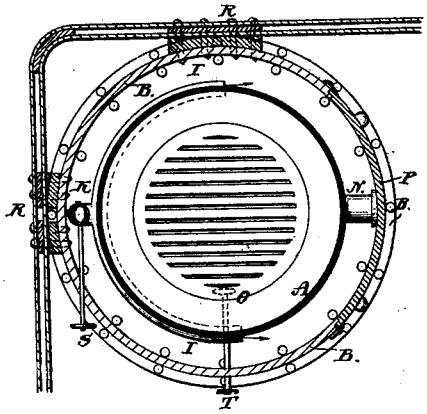
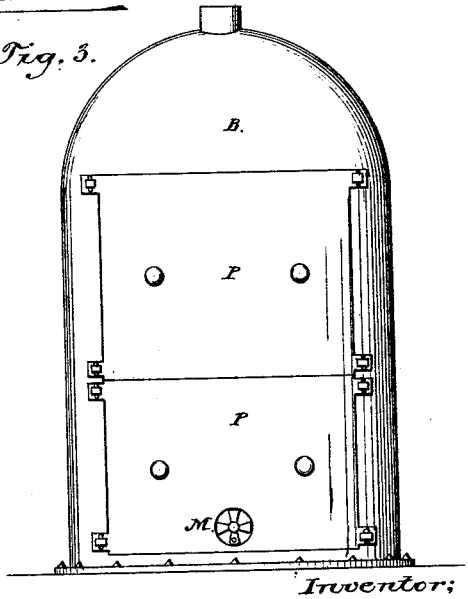


Fig. 3.



Witnesses;

Geo. H. Graham.

John L. Kluber.

Inventor;

Henry Tanner.

by Munson & Philipp

Attorneys.

UNITED STATES PATENT OFFICE.

HENRY TANNER, OF BUFFALO, NEW YORK.

IMPROVEMENT IN CASINGS FOR CAR-STOVES.

Specification forming part of Letters Patent No. **190,929**, dated May 15, 1877; application filed January 31, 1877.

To all whom it may concern:

Be it known that I, HENRY TANNER, of the city of Buffalo, county of Erie and State of New York, have invented certain new and useful Improvements in Means for Preventing the Burning of Railroad-Cars in Cases of Accident; and I do hereby declare the following be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

Great loss of life and destruction of property have arisen from the catching fire and burning of railroad-cars when, by reason of any accident, the cars are broken or overturned, and with them the stoves or other heating devices from which the fire is communicated.

The object of my invention is to prevent communication of fire to the cars from the stove or other heating device in case of accident, and thus obviate the burning of the cars and the consequent loss of life and property therefrom; and it consists in the means hereinafter particularly described and claimed.

In the drawings, Figure 1 represents a vertical section of one end of a railroad-car, showing my invention. Fig. 2 is a horizontal section on line *x x* of Fig. 1. Fig. 3 is a side elevation of part of the same.

A is the stove of any common and well-known construction, preferably of that class known as magazine-stoves. Entirely surrounding this stove is a casing, B, of wrought-iron or other suitable metal capable of withstanding heat, and either of a circular, polygonal, or any other form found desirable or convenient. This casing is securely bolted to the frame-work of the car at its end and side, as shown at R, and to its bottom C. The stove A is firmly secured to the lower portion of the casing, and is provided with a pipe, D, of strong metal firmly bolted thereto, which passes through a neck, E, of the casing, snugly fitting therein, so as to prevent the escape of hot air from the interior of the casing and out at the top of the car. F is a pipe for admitting air to the interior of the casing, provided with a double hood, G, at its upper end, as shown. This pipe is provided with a partition, H, which divides the hood and prevents the air from passing through the latter, and directs it down the pipe, no matter what direction the car is going. Its lower end is bifurcated at I near the bottom of the casing, the bifurcation opening into the interior of the casing. A slide-valve or damper, K, operated by a rod, S, passing through the casing, controls the amount of air admitted to the interior of the casing. L is a pipe leading from the casing to the interior the car for conveying the heated air to suitable registers in the ordinary manner. M is a register controlling the entrance of air from the outside of the casing to a pipe, N, leading to the ash-pit of the stove for supporting combustion. O is a valve, regulating the entrance of air from the interior of the casing to the ash-pit of the stove, for supporting combustion, having a rod, T, projecting through the casing into the car by which it is operated

Either the register M and pipe N or the valve O may be employed to supply air for combustion to the stove, or both may be used.

Access is had to the stove for regulating the fire, supplying fuel, &c., through a door, P, in the casing securely bolted or fastened thereto, which can be removed wholly or in sections, when necessary.

When steam or hot water is employed to warm the car the devices for heating the water can be placed in the casing, and the pipes for conveying the steam or hot water connected thereto and passed through the casing to the car.

The casing being securely bolted to the sides, end, and floor of the car strengthens the same and assists materially in preventing the telescoping of the contiguous cars in case of accident.

This casing may be covered with a non-conductor of heat, if found desirable, such as asbestus, &c., and may be ornamented in any tasteful manner.

As many of said casings may be employed as there are stoves or other heating devices in the car.

The air may be supplied to the stove or other heating device by separate pipes from the bot-

tom, end, or sides of the car, if found desirable, and the air may be supplied to the interior of the casing through pipes communicating with the outside of the car at any point, although I prefer the arrangement shown.

The advantages possessed by my invention are that the stove or other heating device is entirely isolated from the rest of the car, so that, in case of accident, fire cannot be communicated to the car, and the end of the car is materially strengthened to assist in preventing telescoping.

Having thus fully described my invention and the merits it possesses, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the isolating casing with the sides, end, and bottom of the car, in the manner substantially as described, to strengthen the same.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY TANNER.

Witnesses:
M. B. PHILIPP,
JOHN C. KLUBER.