

GRANT, VAN DYNE & PUGH.

Car Stove.

No. 84,183.

Patented Nov. 17, 1868.

Fig. 1

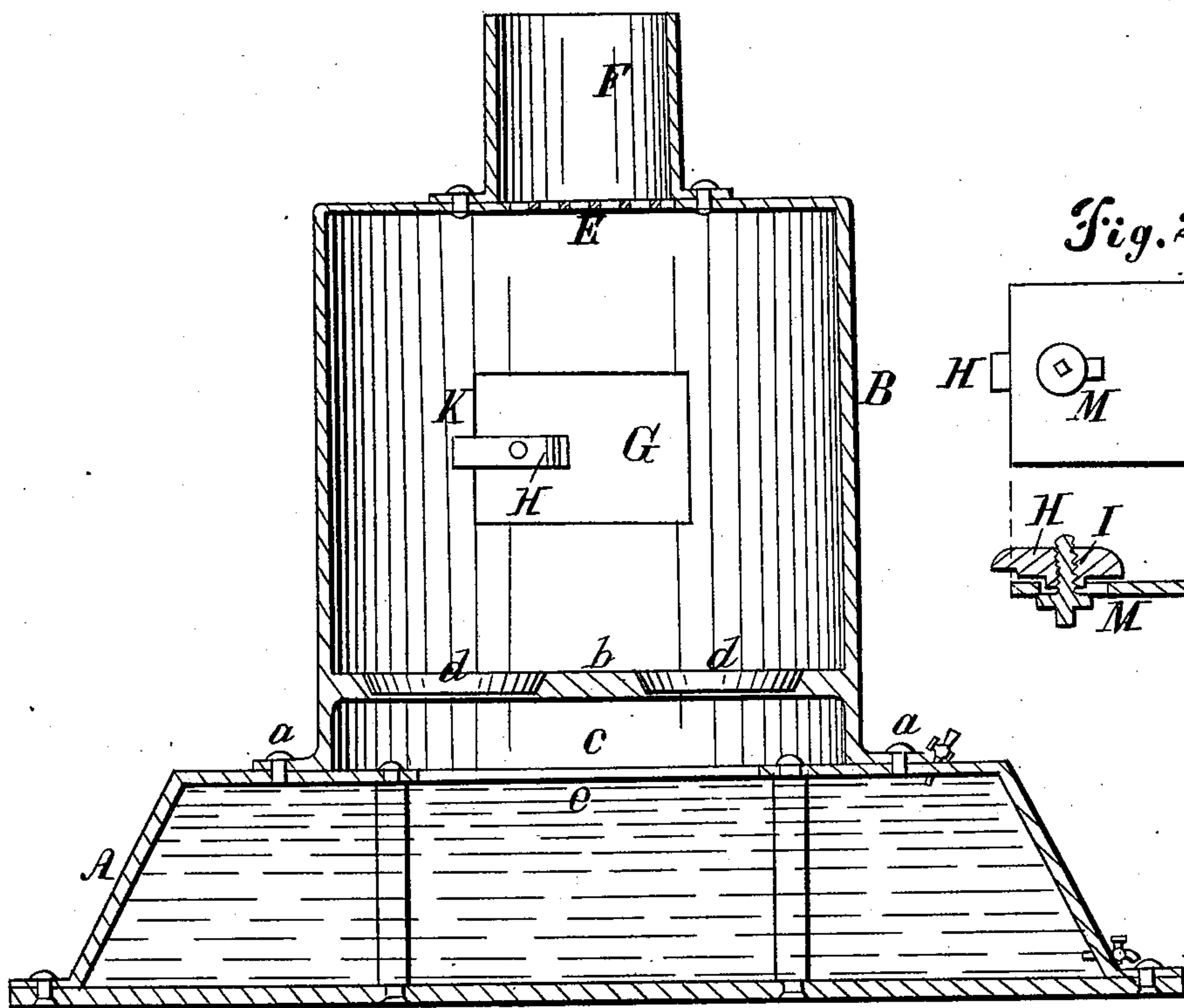
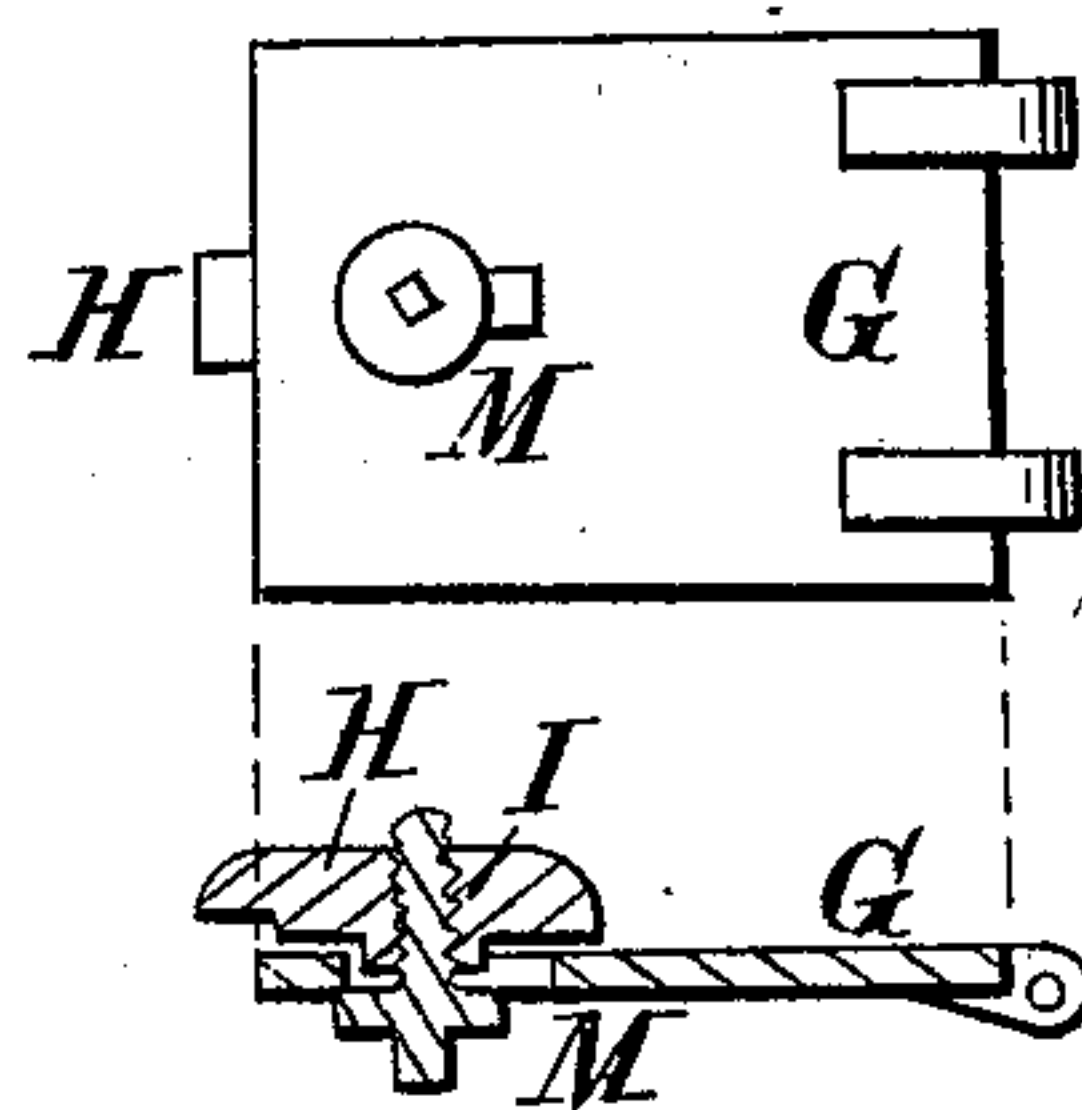


Fig. 2



Witnesses

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# United States Patent Office.

EDWARD M. GRANT, J. B. VAN DYNE, AND T. R. PUGH, OF NASHVILLE, TENNESSEE.

Letters Patent No. 84,183, dated November 17, 1868.

## IMPROVEMENT IN RAILROAD-CAR STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, EDWARD M. GRANT, J. B. VAN DYNE, and T. R. PUGH, of Nashville, in the county of Davidson, and State of Tennessee, have invented a new and improved Safety-Stove; and we 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 drawing, forming a part of this specification, in which—

Figure 1 represents a transverse vertical section of our invention; and

Figure 2, a sectional view of the set-screw door-bolt.

Similar letters of reference indicate corresponding parts.

The invention relates to a new and improved safety-stove for railroad-cars, and consists in a stove, the base of which is a tank to contain water, the whole made of rolled-metal plate, and riveted together in a strong and durable manner, and securely attached to the bottom of the car. The stove is provided with a bottom, upon which the fuel rests, which bottom is placed at a suitable distance above the water-line of its tank-base, so that the water therein will not create steam or careen up against the said bottom while the car is going round a curve or up or down a grade. This bottom is provided with apertures, and suitable lids or valves to close them, the said lids retaining their positions in said apertures by their weight alone. Should the car upset, these lids will fall out of the apertures into the body of the stove, and the water in the tank will rush through said apertures into the stove and extinguish the fire, and thereby prevent the burning of the car and its contents.

The smoke from the stove passes into the smoke-stack through a series of small holes or fine grating, the object being to prevent any of the live fuel from escaping from the stove, in case of its being upset; and the door of the stove is provided with a peculiar set-screw bolt or lock, which braces it securely to its jamb, and prevents all possibility of its being jolted open.

In the accompanying drawings, a stove for burning wood is represented.

In fig. 1, A is the tank-base of the stove, containing the water.

B is the body of the stove.

b is the bottom of the stove, upon which the fuel rests.

d d represent the apertures in the bottom, b, with their lids or valves in them.

C is the space left between the bottom, b, and the

water-line e of the tank-base, to prevent the creation of steam in the tank, and also to prevent its water from careening up against the said bottom.

E represents the holes or grating through which the smoke passes from the stove into the smoke-stack F.

G is the stove-door, and H, its set-screw bolt or lock.

a a represent the manner in which the body of the stove and its tank-base are riveted together.

The tank-base may be provided with cocks, as shown in red, for the purpose of supplying it with water, and emptying it of the same.

The stove and its tank-base may be made of any suitable size or form.

The only difference between a coal-stove and a wood-burning stove, with our invention applied to it, is that the coal-stove is provided with a grate above the bottom, b, the space between the bottom and grate serving as an ash-pit.

In fig. 2, G represents the stove door.

H, the set-screw bolt.

M is a slot in the door, in which the tenon I of the bolt H works back and forward.

J is a screw, by means of which the bolt H is locked in position.

K represents the jamb of the door, which is bit and held tightly between the edge of the door and the end of the bolt H.

When it is desired to open the door, the screw J is loosened by a key fitting upon its head, and the tenon I of the bolt H is moved back in the slot M, which clears the mouth or end of the bolt from the jamb K, and the door is opened.

We do not claim, as new, a stove, with its base made to contain water; but

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

1. In combination with the base-tank A, the bottom, b, with its apertures and lids or valves d, made and arranged in the manner and for the purposes herein set forth and described.

2. The arrangement of the bottom, b, in the stove, forming, between it and the water-line in the tank, the space C, as shown, and for the purposes described.

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