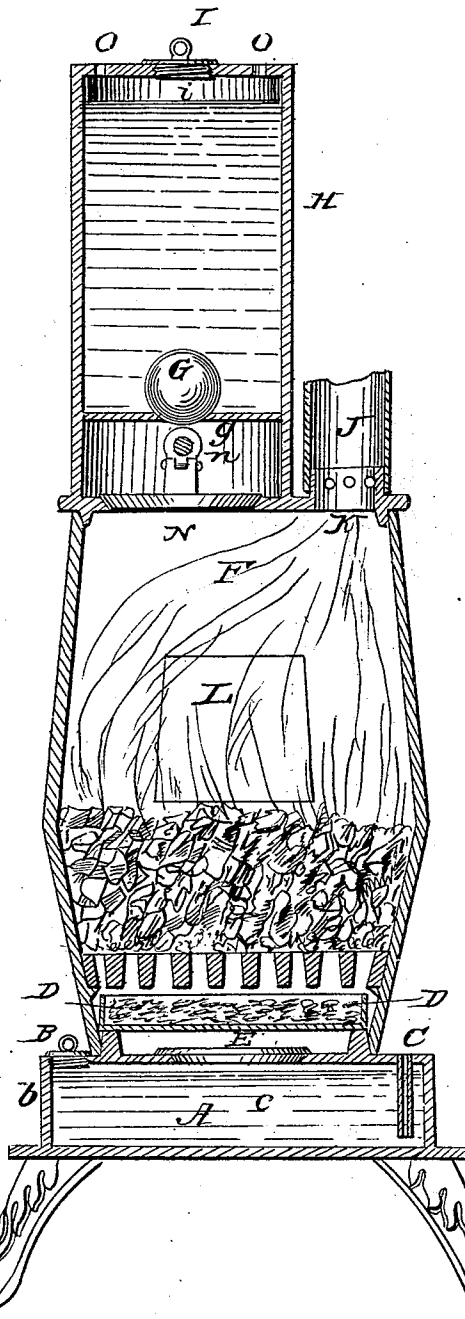


McGILL & KNOX.

Car Heater.

No. 84,295.

Patented Nov. 24, 1868.



Witnesses
Geo. B. Smith
G. H. Knight

Inventors
N. C. McGill
Wm. Knox



WILLIAM C. MCGILL AND WILLIAM KNOX, OF CINCINNATI, OHIO.

Letters Patent No. 84,295, dated November 24, 1868.

SAFETY-STOVE FOR RAILROAD-CARS.

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

To whom it may concern:

Be it known that we, WILLIAM C. MCGILL and WILLIAM KNOX, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Stove for Use on Railroad-Cars and other vehicles; and we hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, the said drawing being a vertical section.

The base of the stove consists of a reservoir, A, for water, the same having an aperture, *b*, closed by a screw-cap, B, and one or more smaller apertures, having tubes C, which descend to nearly the bottom of the reservoir A.

The reservoir A supports the ash-pit D, with which it communicates by an aperture, *e*, closed by a cap, E. The fire-chamber F communicates, by an aperture, *g*, closed by a spherical valve G, with an upper water-reservoir, H, having an aperture, *i*, closed by a screw-cap, I, and smaller apertures O.

The escape-flue J is guarded by a grating, K. The doors L and M, of the fire and ash-chambers, should be kept locked as usual.

N is a trap-door, so hung to its shelf *n* as to gravitate to the horizontal position, as shown, when the

stove is erect, and thus protect the upper reservoir from the heat, but so as to open of itself the moment the stove is overturned.

Should a collision of the car, steamboat, or other vehicle, cause the stove to fall over, the cap E and spherical valve G drop to one side by their weight, and permit the water contained in the reservoirs to flow into and extinguish the fire, while the grating K, in the flue, prevents the escape of embers therefrom.

The small tubular or other openings, C and O, by admitting air, allow the water to flow freely into the overturned stove, and, by emitting steam, avoid the danger of an explosion.

We claim herein as new, and of our invention—

In combination, with the fire-chamber, the upper and lower water-reservoirs H and A, substantially as set forth.

In testimony of which invention, we hereunto set our hands.

W. C. MCGILL.
WM. KNOX.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.