

SAX & KEAR.
Railroad Car Stove.

No. 79,920.

Patented July 14, 1868.

Fig. 1.

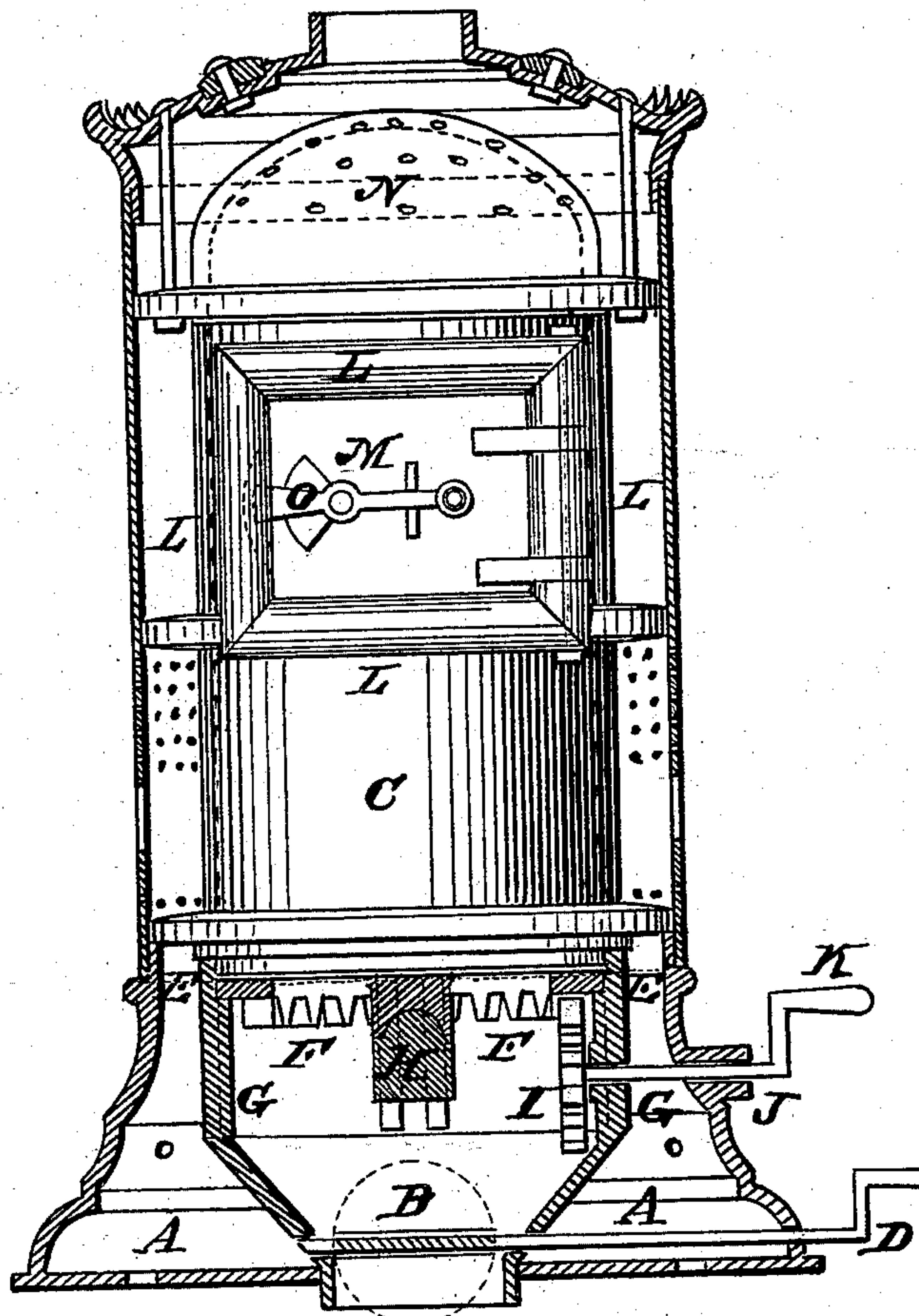
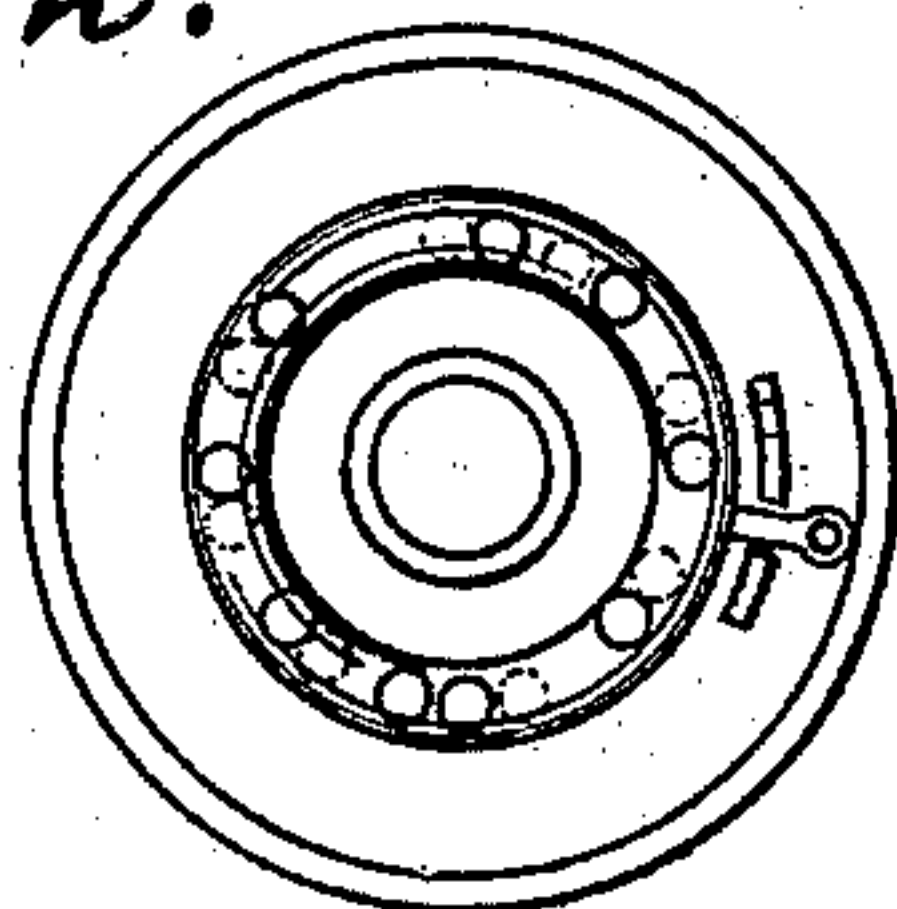


Fig. 2.



Witnesses:
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per
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attys

United States Patent Office.

JOHN K. SAX AND GEORGE W. KEAR, OF KINGSTON, PENNSYLVANIA.

Letters Patent No. 79,920, dated July 14, 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, JOHN K. SAX and GEORGE W. KEAR, of Kingston, in the county of Luzerne, and in the State of Pennsylvania, have invented certain new and useful Improvements in Stoves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being made to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction of a simple and practical stove for heating railroad-cars, being so formed as to allow the ashes to readily be discharged, and to prevent the egress of fire therefrom in case of accident; also in the construction of the door to prevent its being broken or coming open.

In the annexed drawings, forming part of this specification, A represents a conical-shaped base, with solid bottom, made heavy to withstand the jarring of railroad-cars in time of accident, &c. The bottom is provided with holes to admit of bolts for fastening to the floor, also with a hole in the centre to receive the mouth of the ash-pan B, down through which the ashes are to be discharged. The top of the base is open to admit of the cylinder C, and has flanges turned inward at different points on its circumference, to assist in holding the cylinder to its place, and also to which the ash-pan B is bolted. This ash-pan is made with flanges turned outward at the top at different points, and is slipped down through the top of the base, and then turned around, so that the outward flange on the ash-pan comes under the inward flange on the top of the base, and the pan is held up to its place by bolts which pass through the flanges of the ash-pan and base, and also of the cylinder.

The ash-pan is made funnel-shaped, with a valve in the bottom to regulate the draught to a certain extent, and to retain the ashes until it is desired to let them out, when they are dropped down through the bottom of the car by means of a rod, D, extending through the base of the stove, which opens and shuts the valve. Holes are also cut through the sides of the ash-pan for the draught, and a bar, E, on which the grate F rests, is held to its place by a couple of slats G G on the inside of the pan, said slats answering also for some of the bearings for the grate at its outer edge.

The grate F is in a circular form, with a row of cogs around the outer part of its under side, and rests on a pivot, H, in the centre. A pinion, I, meshes into the cogs of the grate, and has a shaft, J, extending out through the base of the stove. A crank, K, is attached to the shaft J, and the grate is made to revolve by turning the crank.

The cylinder C may be cast whole or in pieces, and firmly fastened together. A flange of the cylinder rests on the base of the stove, and allows the cylinder to extend downwards to as near the top of the grate as is desirable.

A projection or flange L extends all around the door M, leaving the door sunk in from the surface to protect it from breaking in case the stove should become upset in time of accident. To prevent the coals or fire from escaping, in case of accident, the cylinder has at the top a dome, N, with small holes for the draught.

The door M is also provided with an eccentric-spring latch, O, to insure safety in case of upsetting, and with a lever on the inside to prevent it from becoming hot and thus destroying the spring of the latch.

The stove, which may be ornamented by open sheet-iron work, outside cylinder, and fancy top, (see fig. 2,) &c., is held down to the floor by bolts extending down through the bottom of its base.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The door M, provided with the eccentric-spring latch O, and sunk in from the surface to protect it from breaking in time of accident, substantially as and for the purposes above set forth.

2. The combination of the base A, pan B and its valve, revolving grate F and its cog-gearing, perforated cylinder C, and its perforated dome N, and the door M, all constructed and forming a cylindrical stove for railroad-cars, and operating as specified.

In testimony that we claim the foregoing, we have hereunto set our hands, this second day of April, 1868.

JOHN K. SAX,
G. W. KEAR.

Witnesses:

J. M. MASON,
REUBEN MURES.