

(No Model.)

D. ROSS & N. BROOKER.

FIRE EXTINGUISHING ATTACHMENT FOR CAR STOVES.

No. 376,163.

Patented Jan. 10, 1888.

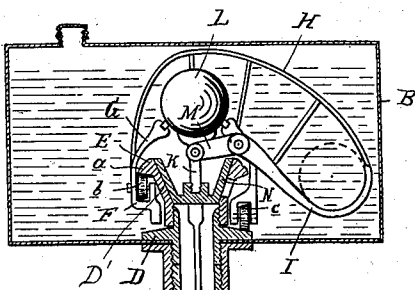


Fig. 1

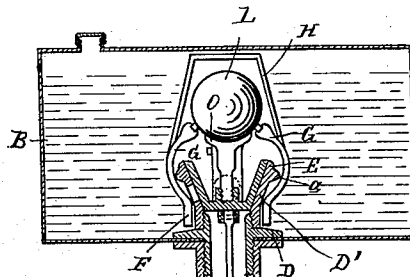
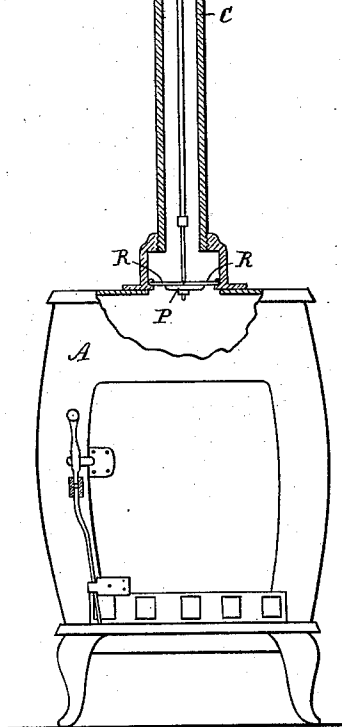
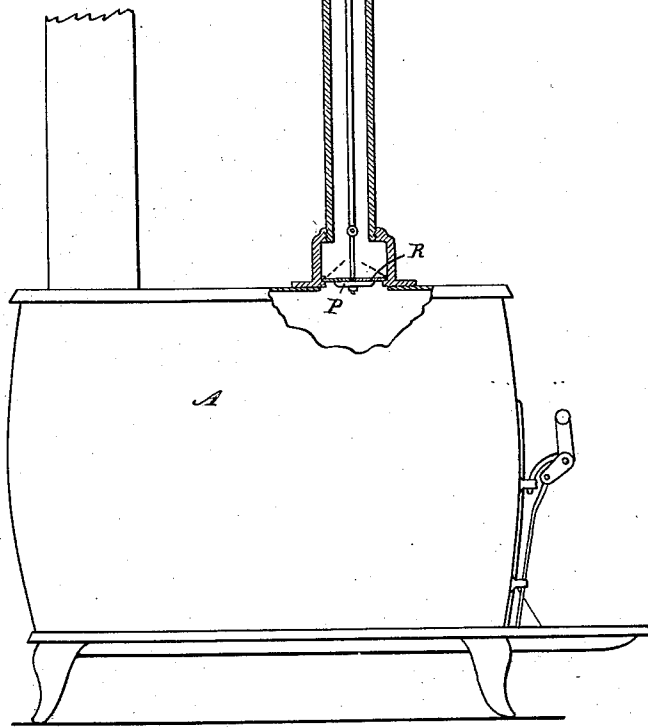


Fig. 2



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UNITED STATES PATENT OFFICE.

DONALD ROSS AND NORTON BROOKER, OF ST. JOSEPH, MISSOURI.

FIRE-EXTINGUISHING ATTACHMENT FOR CAR-STOVES.

SPECIFICATION forming part of Letters Patent No. 376,163, dated January 10, 1888.

Application filed May 12, 1887. Serial No 237,955. (No model.)

To all whom it may concern:

Be it known that we, DONALD ROSS and NORTON BROOKER, of St. Joseph, in the county of Buchanan and State of Missouri, have invented new and useful Improvements in Fire-Extinguishing Attachments for Car-Stoves; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in fire extinguishing attachments to stoves.

The object of the invention is to provide efficient means for putting out the fire in a car-stove in case of accident by allowing a quantity of water to escape from a tank into the stove when such stove shall have been turned over, or partially so; and to that end the invention consists in the peculiar construction, arrangement, and combinations of the various parts, all as more fully hereinafter set forth.

Figures 1 and 2 are vertical sections taken at right angles to each other.

In the accompanying drawings, which form a part of this specification, A represents a car-stove, above which is located a suitable tank, B, the two being connected by a pipe, C. The upper end of the pipe has secured to it within the tank a turn-table, D, terminating in a pipe, D', which is provided with the flaring mouth E, having an annular flange, *a*.

F is a carriage which turns upon the table D, and is provided with suitable anti-friction rollers, *b c*, the former of which bear against the flange *a*, while the latter rotate upon the flange of the turn-table.

G are arms rising from the carriage F, their inner ends being bent inwardly over the flaring mouth of the pipe to support the weight or ball L.

H is a cage carried by the carriage.

I is a lever fulcrumed to one of the arms G, its longer arm extending into the projecting portion of the cage H, while its shorter arm, M, is connected to the upper end of the valve-stem K. This valve-stem carries a valve, N, and the latter has a seat in the flaring mouth of the pipe, as shown. The upper end of the valve-stem has secured to it a cup, O, which

also serves to support the ball, while the weight of the ball keeps the valve closed upon its seat, excepting in cases where the stove is tipped over. The valve-stem projects down through the pipe, as shown, and carries a flanged head, P, which, when the valve stem is raised, opens the gates R in the top of the stove. These gates are especially designed to keep soot and other matter from passing up into the pipe from the stove.

In practice, the parts being constructed and arranged substantially as herein shown and the tank filled with water, in case of an accident and the stoves should be tipped sufficiently to allow the ball to roll out of its bearings, it would roll down into the arm of the cage upon the lever I and depress the latter and thus necessarily pulling up the valve-stem and opening the valve N and the gates in the stove-top, thus allowing the water in the tank to escape through the pipe into the stove and effectually put out the fire therein. The stove-doors should be provided with a safety locking device that would keep them closed under all circumstances.

It is evident that, in case the stove and pipe be thrown to either side by the upsetting of the car containing it, the side of the carriage that is the heaviest—viz., the side on which the lever projects—will be the lowest, as it will turn around on the table until it assumes that position, and thus the ball will roll down upon the lever and open the valve.

What we claim as our invention is—

1. The combination, in a device for the purpose described, of a tank provided with an escape-valve, a rotating cage extended to one side, and lever, and a ball or weight normally resting upon the stem of the valve and adapted to open and close the valve, substantially as and for the purposes set forth.

2. The combination of a tank, B, provided with a turn-table, D, having a flaring valve-seat, with a carriage, F, arms G on said carriage, cage H, also carried by the carriage, extended to one side of the turn-table, valve N, lever I, and ball L, all constructed, arranged, and operating substantially in the manner and for the purposes described.

3. The combination, with the stove and the tank connected therewith, of a turn-table, D,

within the tank, a flaring valve-seat on said turn-table, a carriage, F, carrying cage H, extending to one side of said turn-table, and arms G, the valve N, having stem K, the lever I, connected with said stem, cup O at the upper end of said stem, and the ball L, normally resting on said cup, substantially as described.

4. In a device for the purpose described, the combination of the stove A, tank B, pipe C, to turn-table D, having flaring valve-seat, car-

riage F, arms G, cage H, extending to one side of said turn-table, lever I, valve N, valve-stem K, cup O, ball L, and gates R, all constructed, arranged, and operating substantially in the manner and for the purposes specified. 15

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Witnesses:

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S. D. FLICK.