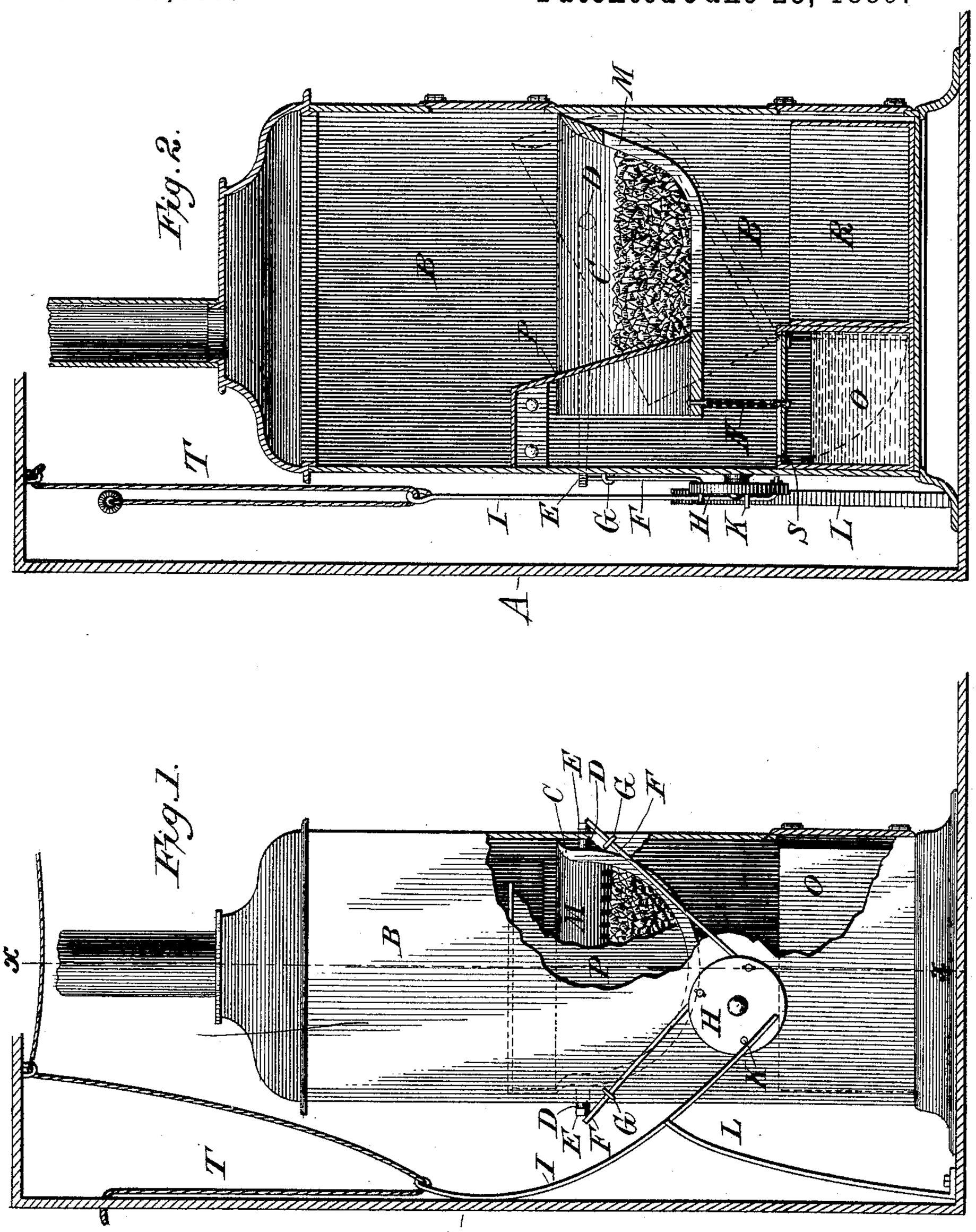
(No Model.)

A. M. SPAULDING.

STOVE FOR RAILWAY COACHES.

No. 406,007. Patented June 25, 1889.



Witnesses:

Mark M. Powers

Marsden C Burch

Inventor.

Almon M. Spaulding

By his Attorney

L. V. Moulton.

UNITED STATES PATENT OFFICE.

ALMON M. SPAULDING, OF GRAND RAPIDS, MICHIGAN.

STOVE FOR RAILWAY-COACHES.

SPECIFICATION forming part of Letters Patent No. 406,007, dated June 25, 1889.

Application filed March 9, 1888. Serial No. 266,778. (No model.)

To all whom it may concern:

Be it known that I, ALMON M. SPAULDING, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Stoves for Railway-Coaches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in stoves for railway-coaches, which are provided with mechanism for dumping the fire into a vessel containing water in case of accident.

The objects of my invention are, first, to provide means whereby a person upon the engine or in any coach of the train can simultaneously extinguish the fires in all the stoves throughout the train; second, to provide means whereby the fire in any single stove will be extinguished in case the adjacent end of the coach should be crushed inward; third, to provide a simple and reliable dumping mechanism; fourth, to provide a mechanism that may be cheaply constructed and occupy but little space outside the stove. I accomplish these results by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a device embodying my invention, and Fig. 2 a vertical section of the same on the line $x\,x$ of Fig. 1.

A and A′ represent the end and side of a coach, respectively; B, a stove, of any convenient form, having a detached fire-pot C within suspended upon trunnions D located at either side and near the front of the same. Said trunnions, passing through the sides of the stove, have attached the arms E E, which extend rearward and a little beyond the corners of the stove, where they rest upon the rods F F and are supported thereby, thus sustaining the fire-pot in a horizontal position. The rear end of this fire-pot is open to freely discharge the contents when lowered, and when said fire-pot is in a horizontal position the said end is closed by a fixed plate P, attached to the body of the stove. The bottom of said fire-pot is provided with openings forming a grate M, upon which the fuel rests, below which is the ash-pan R.

The water-tank O is provided with a cover S, hinged at one side, opening downward within the tank and sustained in a horizontal position by a chain N, attached to said cover and to the rear end of the fire-pot. This cover, when closed, keeps the water from spilling or evaporating, and also prevents cinders and ashes from falling into the tank.

The rods F F pass through loops G G, within which they slide freely, and are pivoted to a disk H, which rotates upon a stud attached to the stove. These rods are attached to the disk at such points that when the disk turns in one direction they are withdrawn from beneath the arms E E, and when the disk turns in the opposite direction they are thrust outward beneath and sustain said arms. To hold the disk in position and rotate the same, a rod I is pivoted to said disk at the proper point, as shown, which rod extends upward and to one side, and rests against the end of the coach, terminating in an eye at its upper end.

T is a cord which passes through a proper opening in the upper part of the end of the coach and extends from end to end of the train and connected from coach to coach after the manner of the usual bell-cord, passing downward in a loop or "bight" at each stove and running through the said eye in the upper end of the rod I.

K is a stop-pin, which is fixed in the disk H, and engages with the rod I, to prevent further rotation of the said disk and to enable the rod to rotate said disk when pushed inward by the end of the coach.

L is a prop extending from the floor or any other distant part of the coach to the rod I to move said rod in case such floor or other part is crushed inward by any accident.

The operation of my device is as follows: In case of accident, or if for any reason it becomes desirable to extinguish the fires in all the stoves in the train, a person upon the engine or upon any of the coaches can, by pulling upon the cord T, cause the disk H on each stove to rotate and withdraw the rods F F from beneath the arms E E, when the fire-pot C and the cover S will at once swing downward upon their respective pivots and assume the position shown by the dotted lines, thus opening the water-tank and discharging the contents of the fire-pot into the water and at once

extinguishing the fire. In case of collision, should the end of the coach or the floor be crushed inward the rod I would be pushed inward and cause the disk H to rotate as before, the same results following.

What I claim, and wish to secure, is as follows:

1. In a stove, a fire-pot having trunnions at one side of its center of gravity, arms attached to the outer ends of said trunnions, fastenings engaging with said arms and retaining said fire-pot in position, and a cord connected with and adapted to release said fastenings, said cord being continuous throughout the train, substantially as described.

2. In a stove, a fire-pot having one end sustained by trunnions and the other end sustained by detachable fastenings, the latter end being open, in combination with a stationary plate attached to the stove and closing said end when the fire-pot is in a horizontal position, substantially as described.

3. In a stove, a fire-pot having an open end supported upon trunnions, said open end closed by a fixed plate, and a tank, adapted to contain water, located beneath said open end, into which the contents of said fire-pot are discharged when it turns upon said trunnions, substantially as described.

4. In a stove, an ash-pan and water-tank located side by side upon substantially the same level, a fire-pot above the same having trunnions upon which it turns to discharge its contents at one side into said water-tank, and a grated bottom through which the ashes escape into said ash-pan, substantially as described.

5. In a stove, a fire-pot adapted to turn upon trunnions and discharge its contents, a tank adapted to contain water and receive the contents of said fire-pot, and a cover to said tank supported in place by a chain attached to said fire-pot and adapted to open when said fire-pot turns upon its trunnions, substantially as described.

6. In a stove, a fire-pot having trunnions at one side of its center of gravity, arms attached to said trunnions, and sliding rods supporting said arms and attached to a disk having a rod attached to hold and rotate said disk, substantially as described.

7. In a stove, a disk to which are pivoted rods passing through loops, and supporting-arms attached to a pivoted fire-pot, said disk provided with a stop-pin engaging with a rod pivoted to said disk and resting against the end of the coach, substantially as described.

8. In a stove, a fire-pot having trunnions at one side of its center of gravity, arms attached to the outer ends of said trunnions, fastenings engaging with said arms to sustain said fire-pot in position, and the prop L, attached to the floor or other distant part of the coach and adapted to release said fastenings when said floor or part is crushed inward, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALMON M. SPAULDING.

Witnesses:
SARAH A. MOULTON,
LUTHER V. MOULTON.