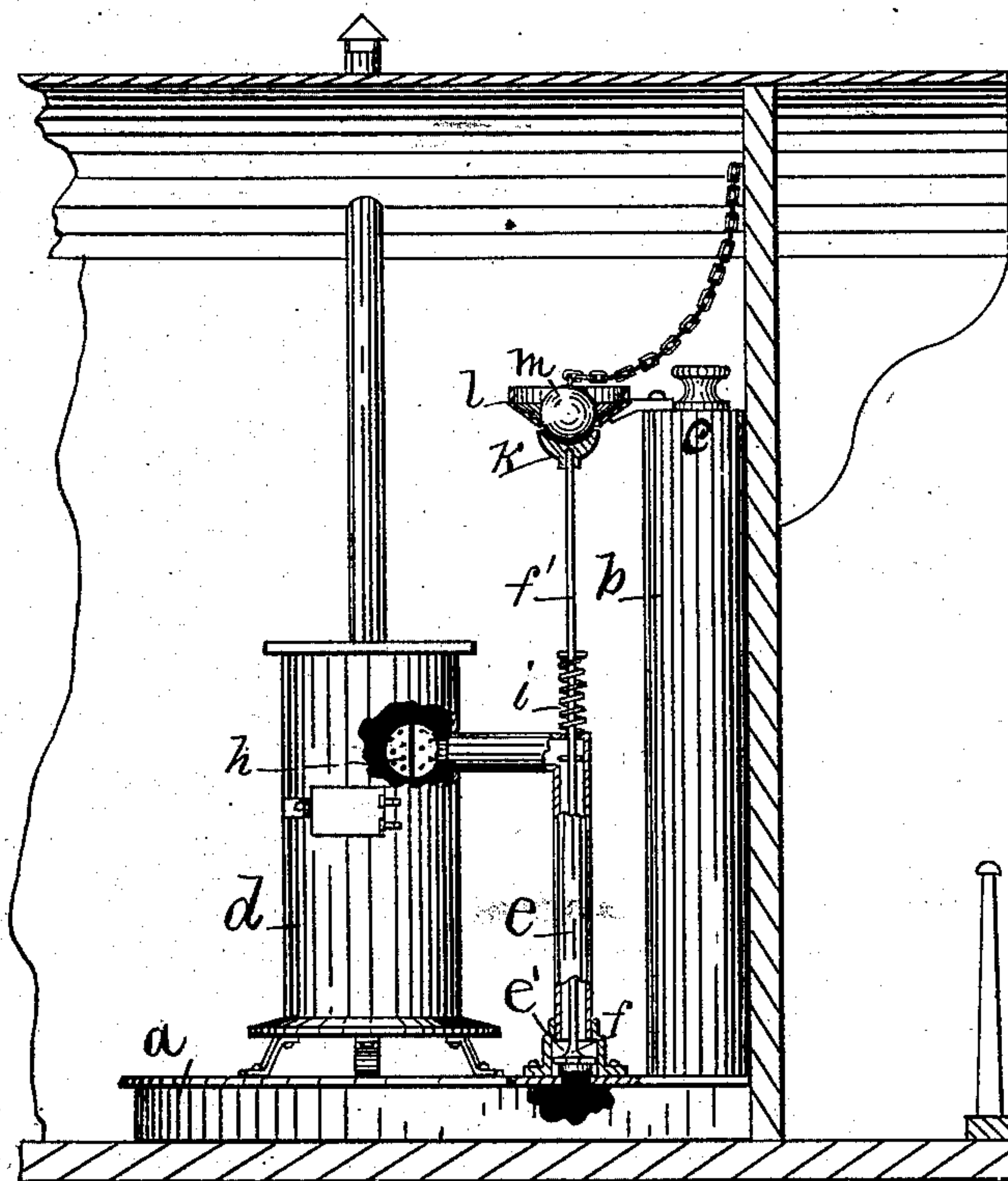


(No Model.)

J. BERG.  
Fire Extinguisher for Railway Cars.

No. 235,847.

Patented Dec. 28, 1880.



Witnesses:

Frank W. Heers.

L. A. Wilkinson.

Inventor:

John Berg,  
By Thomas G. Orwig,  
Attorney.

# UNITED STATES PATENT OFFICE.

JOHN BERG, OF GRINNELL, IOWA.

## FIRE-EXTINGUISHER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 235,847, dated December 28, 1880.

Application filed October 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN BERG, of Grinnell, in the county of Poweshiek and State of Iowa, have invented an Improvement in Fire-Extinguishers for Railway-Cars, of which the following is a specification.

My invention is an improvement relating to patents issued to me for fire-extinguishers on cars, April 6, 1880, and July 13, 1880, Nos.

226,220 and 229,845.

It consists in changing the horizontal portion of my stand-pipe reservoir in such a manner that it will be adapted to be used as a platform for the stove, and will also dispense with the unsightliness of the apparatus fixed over the stove, and thereby economize space, as hereinafter fully set forth.

The accompanying drawing illustrates the construction, application, and operation of my improvement.

*a* represents the main portion of my reservoir, fixed to the floor of a car in a horizontal position. It is made flat, and its end round, adapting it for a car-stove platform. It is preferably made of boiler-iron, and may vary in size, as desired.

*b* is a branch extending vertically from the rear end of the horizontal part *a*. The water is let into the reservoir by means of a port, *c*, situated in the top of the vertical branch *b*.

*d* is a car-stove, fixed to the horizontal part of the reservoir contiguous to the vertical branch.

*e* is a vertical tube that has a valve-chamber, *e'*, at its lower end and a horizontal branch at its upper end.

*f* is a valve that fits in the valve-chamber *e'*. It is fixed upon the lower end of a valve-stem, *f'*, in the tube *e*. The valve-stem has horizontal projections near the top of the vertical tube to prevent the valve *f* from rising against the roof of the valve-chamber and closing the opening. The lower end of the tube is fixed over a valve-seat on the horizontal portion of the reservoir, and its upper end inserted in an opening in the side of the car-stove.

*h* is a rose placed upon the end of the tube projecting inside of the stove to sprinkle and distribute the water over the fire.

*i* is a coiled spring placed upon the valve-stem *f'*, immediately above the tube *e*, that will in its normal condition exert its force to open the valve and allow the water in the reservoir to flow into the stove and deluge the fire.

*k* is a cup-shaped platform fixed upon the top end of the valve-stem.

*l* is a rim or ball guard bolted to the top of the vertical part of my reservoir. It projects out and surrounds the cup-shaped platform *k*.

*m* represents a ball-weight resting upon the cup-shaped platform in such a manner that its force of gravity will, when the car is in a level and normal condition, be transmitted through the valve-stem to the valve and hold it closed, and when the car is thrown into an abnormal position the ball will be displaced from the platform, and the valve will be automatically opened by means of the spring *i*.

By thus arranging a reservoir with a car-stove I economize space and make a more convenient and sightly apparatus for automatically deluging a fire in a stove when accidents occur to throw the car into an abnormal position.

I claim as my invention—

1. A stand-pipe reservoir having a flat horizontal portion adapted for a stove-platform, in combination with a car, for the purposes specified.

2. The ball-guard *l*, in combination with the stand-pipe reservoir, the valve *f*, the stem *f'*, and cup-shaped platform *k*, substantially as shown and described.

3. The stand-pipe reservoir *a b c*, having a flat horizontal portion adapted for a stove-platform, the car-stove *d*, the vertical tube *e*, having valve-chamber *e'*, the rose *h*, the valve *f*, the valve-stem *f'* *g*, having a cup-shaped platform, *k*, the ball-weight *m*, the ball-guard *l*, and the valve-operating spring *i*, arranged and combined substantially as shown and described, for the purposes specified.

JOHN BERG.

Witnesses:

V. B. WEEKS,  
H. M. HUNTOON.