

(No Model.)

2 Sheets—Sheet 1.

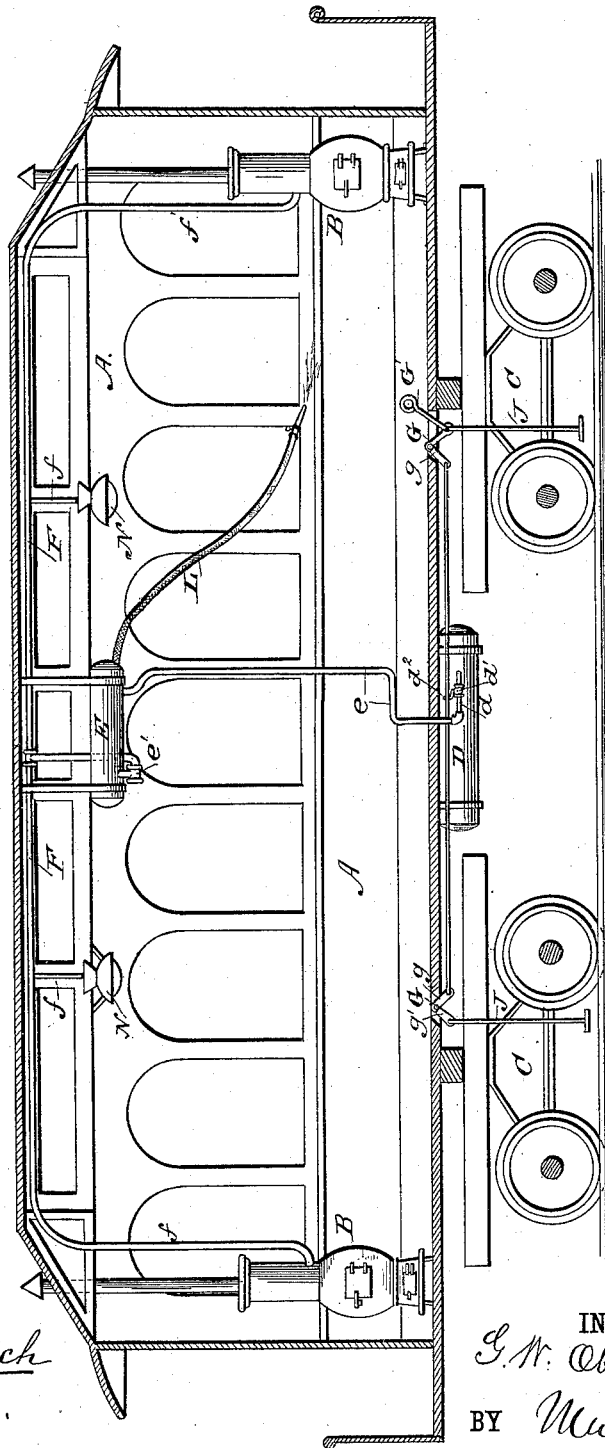
G. W. OBORN.

FIRE EXTINGUISHER FOR RAILWAY CARS.

No. 383,004.

Patented May 15, 1888.

Fig. 1.



WITNESSES:
Fred G. Dieterich
John H. Kemon.

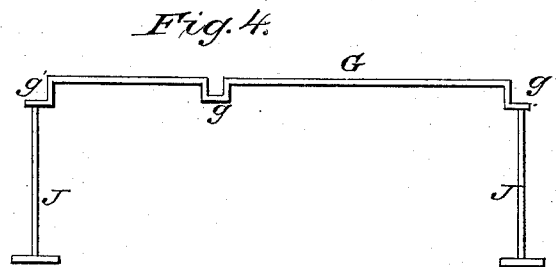
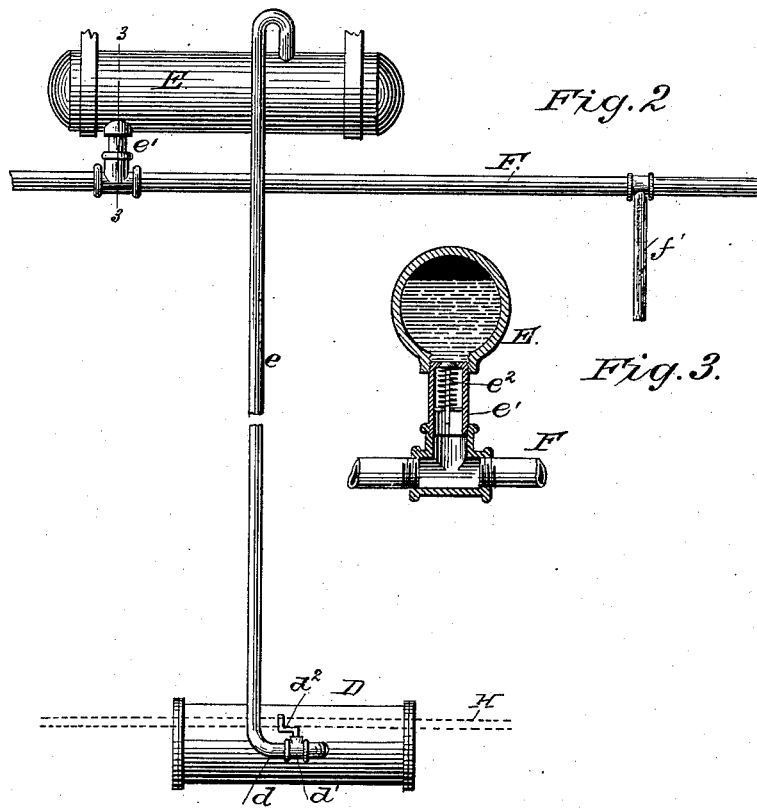
INVENTOR:
G. W. Oborn
BY *Munn & Co*
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

GEORGE W. OBORN, OF COLUMBUS, OHIO.

FIRE-EXTINGUISHER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 383,004, dated May 15, 1888.

Application filed May 20, 1887. Serial No. 232,920. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. OBORN, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Fire-Extinguishers for Railway-Cars, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional elevation of a car with my invention applied as in use. Fig. 2 is a detail view of the tank, air-cylinder, and connecting-pipes. Fig. 3 is a section on line 3 3, Fig. 2; and Fig. 4 is a detail view.

The invention consists in connecting the stoves and lamps with a tank containing a fire-extinguishing composition, the tank being in turn connected with the air-brake drum or cylinder by a valved pipe, so that when a car is derailed compressed air will be allowed to flow from air-brake cylinder or drum into the tank and force the composition therefrom into the stoves and lamp-flames and extinguish the fires and put out the lamps; and the invention consists in the various combinations and constructions, as will be hereinafter fully described and claimed.

A represents a car of the passenger type, in the opposite ends of which are two stoves, B B, of any of the various styles.

C C represent the car-trucks, and D the air-brake cylinder or drum, from which a short pipe, *d*, extends, the said pipe having a valve, *d'*, provided with a crank, *d''*.

E is the tank for containing the extinguishing composition, preferably in fluid form. The tank E is located, as shown in the drawings, in the car above the window at about the center, and is connected with the pipe *d* by the pipe *e*.

F is a pipe extending longitudinally of the car and having two depending branches, *ff*, one at each end, communicating with the interior or fire-space of the stoves B. The pipe F is also provided with short tubes *f'*, leading to the lamps N in the top of the car. The pipe F is connected with the tank by the short pipe *e'*, having a spring-valve, *e''*, adapted to be operated by the force of the compressed air entering the tank, and forcing the fluid out of the tank through said pipe *e'* into the pipe F, and thence to the fires and lamps.

G are rock-shafts mounted on the under side

of the car above the trucks, and each provided with a crank, *g*, between its ends, extending toward the center of the car, and with oppositely-extending cranks *g'* at its ends.

H is a valve-operating rod connected at its ends to the cranks *g*, and between its ends to the crank *d''* of the valve *d'*, so that when either rock-shaft *g* is turned it will pull the rod and open the valve *d* to admit the compressed air into the tank E.

J are the triggers depending from the cranks *g'*, and extending down between the wheels of the trucks to points just above the rails, so that when a truck jumps the track the triggers will strike the rails and be forced upward, thereby rocking the shaft G and operating the rod H and the valve *d'*, as above set forth.

In order that the rock-shafts may be operated from within the car, should occasion require, one or more of the cranks *g'* are provided with hand-lifts G', which extend up through the floor of the car, and by pulling which the rock-shafts will be turned to draw the valve-rod H.

L is a section of hose connected with the tank E, so that should the car take fire from the lamp the fire may be extinguished by pulling on the hand-lift G'. The compressed air will force the fire-extinguishing liquid from the tank E through the said hose.

It will be understood that the tank E may be located in any suitable part of the car, and that I do not limit myself to the exact mechanism shown in the drawings, as the same may be varied somewhat without departing from the spirit of my invention.

Any suitable chemical fire-extinguishing material may be used in the tank.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a fire-extinguisher for cars, of a compressed-air receiver with a tank for containing a fire-extinguishing material, and having an outlet and an outward-opening spring-pressed valve therein, and a pipe leading from the compressed-air receiver to the tank and provided with a valve, whereby, when the compressed air is admitted into the tank, the pressure will force the spring-valve outward and discharge the contents of the tank, substantially as set forth.

2. The combination, in a fire-extinguisher for cars, with the air-brake system applied thereto, of a tank for containing a fire-extinguishing material and provided with an outlet in its bottom, an outward-opening spring-seated valve therein, a pipe connecting the upper part of the tank with the compressed-air supply of the brake system, and a valve in said pipe, substantially as set forth.

3. The combination, in a fire-extinguisher for cars, with air-brake mechanism, of the fire-extinguishing mechanism, a valved pipe leading from the air-brake cylinder to the fire-extinguisher, the rock-shafts G, having cranks g and end cranks, g', the triggers J, depending from cranks g' down between the wheels of the trucks, the hand-lifts G', extending up through the floor of the car, and the rod H, connected at its ends to cranks g' and between its ends to the valve in the said valved pipe, substantially as set forth.

4. In a fire-extinguisher for cars, the combination of the air-brake mechanism, the tank E, having the outlet e' in its bottom, the downward-opening valve e' therein, a spring for closing said valve against the pressure of the normal contents of said tank, the pipe F, extending from end to end of the car and having branches leading to the stoves and to the lamps, and a hose connected directly to the tank, with a pipe for conducting the compressed air from the brake mechanism into the top of the tank, whereby the extinguishing material will be forced by the full power of the compressed air through the pipes to the stoves and lamps or through the hose, substantially as set forth.

GEORGE W. OBORN.

Witnesses:

JAMES T. COCKBURN,
T. M. LIVESAY.