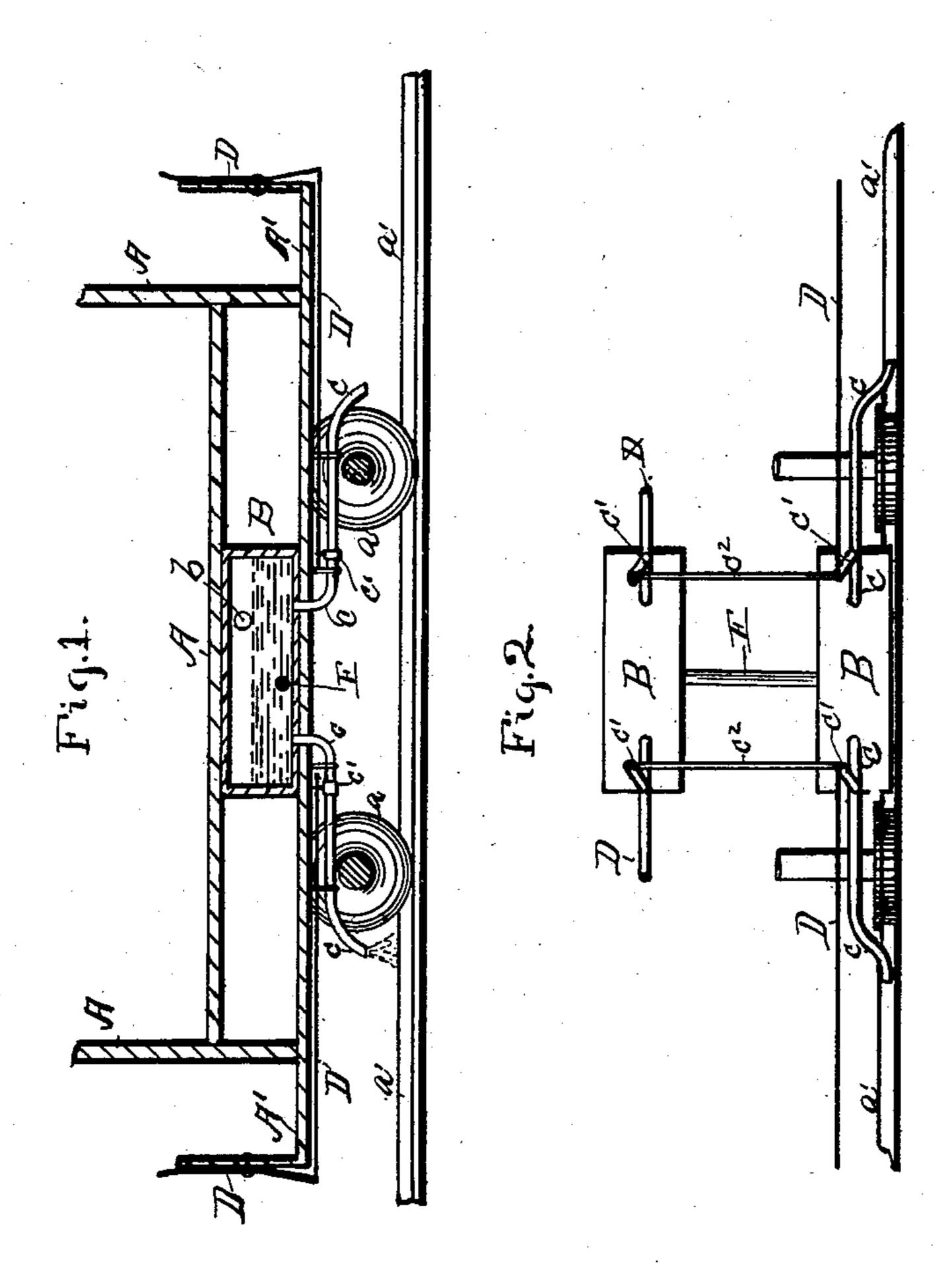
(No Model.)

## J. L. FISHER.

APPARATUS'FOR WATERING RAILWAY TRACKS.

No. 364,001.

Patented May 31, 1887.



Witnesses (J. C.) Lele Joseph L. Fisher, by J. H. Stevenson Attorney.

## United States Patent Office.

JOSEPH L. FISHER, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO LORIN CARR, OF CANTON, AND J. J. SMITH, OF CLEVELAND, OHIO.

## APPARATUS FOR WATERING RAILWAY-TRACKS.

SPECIFICATION forming part of Letters Patent No. 364,001, dated May 31, 1887.

Application filed September 17, 1886. Serial No. 213,843. (No model.)

To all whom it may concern:

Be it known that I, Joseph L. Fisher, of Pittsburg, Pennsylvania, have invented a new and useful Improvement in Apparatus for 5 Watering the Rails on Railroad-Tracks, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

Similar letters of reference indicate corre-

to sponding parts.

The object of my invention is an apparatus for watering the tracks of street-cars or steamcars on the curves in the road, so that the wheels will more easily slip over the rails, by 15 greatly reducing the friction.

In the accompanying drawings, Figure 1 is a side view of a street-car, and Fig. 2 is a bot-

tom view of the same.

A A is the body of the car. A' A' are the 20 rear and front platforms. a a are the wheels. a' is the track or rails. B is the water-tank; b, the filling orifice of the tank. c c are pipes. c' c' are crank-arms for actuating the valves in the pipes c c.  $c^2 c^2$  are rods connecting and 2; operating the valves. DD are rods to operate—that is, to open and close—the valves.

The tanks are two in number—one on each side of the car—and are placed, preferably, beneath the seats and at about the middle of the

30 car.

When it is desired to wet the rails, the driver of the (street) car takes hold of the rod or lever D and pushes it forward, thus drawing the valve open, when the water begins to flow 35 through the pipes c and falls on the rails directly in front of the wheels; or it may be made to fall directly on the wheel, so that it will run down on the track as the wheel revolves. By attaching a connecting - rod  $c^2$  between the 40 valve on one side to another on the side immediately opposite, as shown in Fig. 2, both tracks or both rails can be wet at the same operation of the rod or lever D. It will be seen by reference to the drawings that I make pro-45 vision for operating the valves from either end of the car, so that the rails can be watered directly in front of the wheels in going either way.

By actual experiment I find that a wet track 50 at curves is fully twenty-five per cent. easier on the team than when dry, and for this reason it would be a very useful thing to water the rails at the curves. By connecting the two

tanks by means of a pipe, F, both can be filled at the same time and from one side.

Though I only show my invention as attached to a street-car, yet it can readily be attached to steam-cars as well, and by having the operating-rods on the locomotive.

In applying my apparatus to steam cars the 60 water would be applied to the track in rear of

the locomotive—say on the tender.

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

1. The watering apparatus herein described. consisting in two tanks, each provided with branch pipes having their outer open ends above the rails, each of said pipes being provided with crank-actuated valves, in combi-70 nation with a cross-rod having its outer ends jointed to the cranks for actuating the valves, and a rod, D, for operating said valve-cranks and cross rod, substantially as described, and for the purposes set forth.

2. The watering apparatus herein described, consisting in two tanks, each provided with branch pipes having their outer open ends above the rails, each of said pipes being provided with crank-actuated valves, in combi- 80 nation with a cross-rod having its outer ends jointed to the cranks for actuating the valves, and a rod, D, for operating said valve cranks and cross rod, said rod D having its inner end jointed to the joint of the valve crank and 85 cross-rod, the outer end of the rod D extending forward, whereby it may be operated by an attendant, substantially as specified.

3. The watering apparatus herein described, consisting in two tanks, each provided with 90 branch pipes having their outer open ends above the rails, each of said pipes being provided with crank-actuated valves, and a communicating cross-pipe for connecting said tanks, in combination with a cross-rod having 95 its outer ends jointed to the cranks for actuating the valves and a rod for operating the cross-rod and valve-cranks simultaneously, substantially as described, and for the purposes set forth.

In testimony that I claim the foregoing as my invention I hereto set my hand in presence of two witnesses.

100

JOSEPH L. FISHER. Witnesses: D. E. DAVIS, JAS. F. GILDER.