E. BUZBY.

Railway-Tank Feeders.

No. 155,705. Patented Oct. 6, 1874.

Fig. 1.

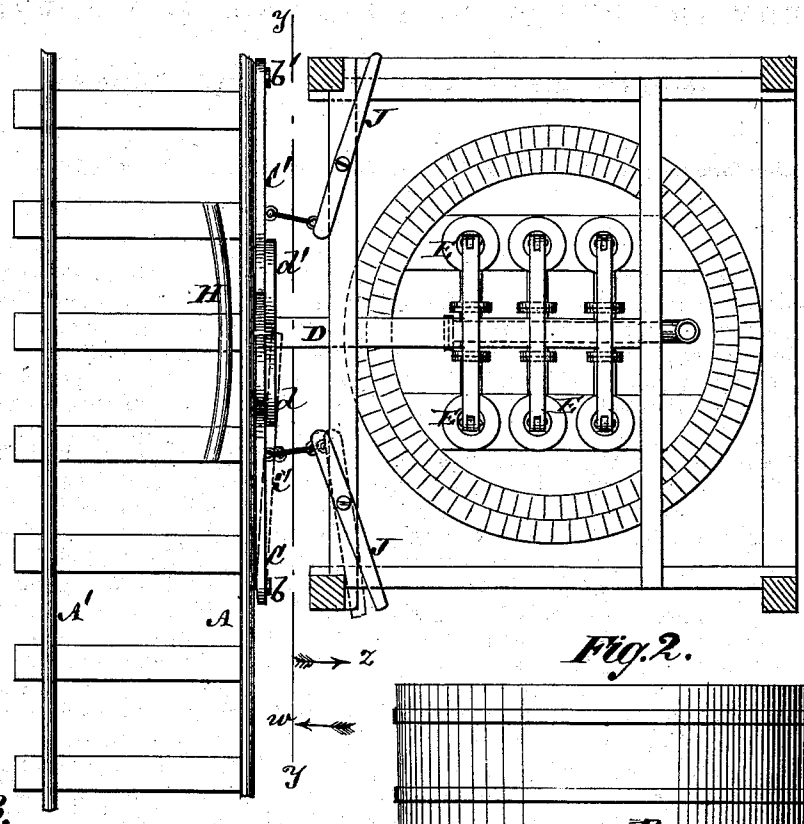


Fig. 2.

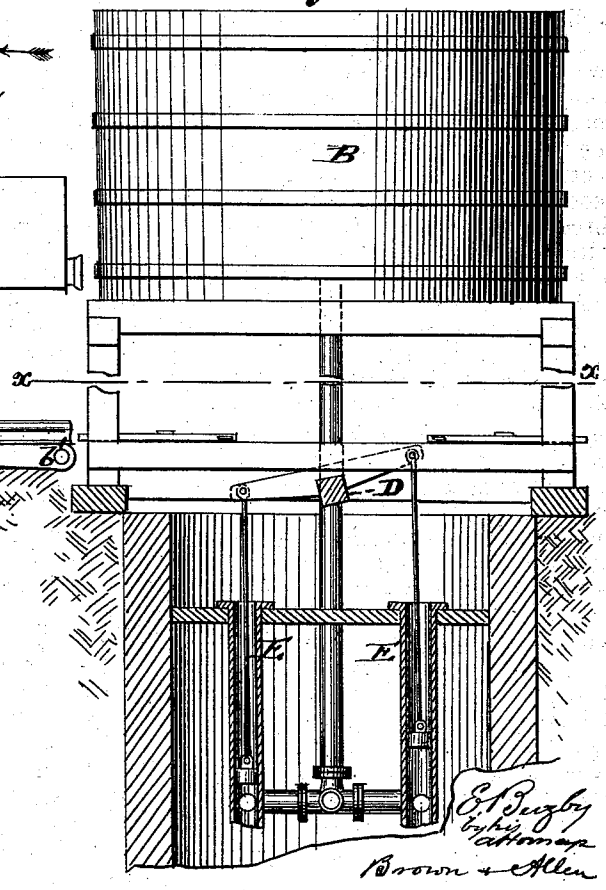
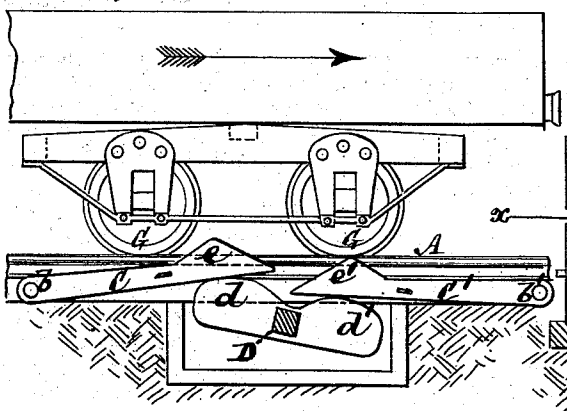


Fig. 3.



Witnesses
John Booker
Fred Haynes

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UNITED STATES PATENT OFFICE.

EDWARD BUZBY, OF SHAMONG, NEW JERSEY.

IMPROVEMENT IN RAILWAY-TANK FEEDERS.

Specification forming part of Letters Patent No. **155,705**, dated October 6, 1874; application filed July 30, 1874.

To all whom it may concern:

Be it known that I, EDWARD BUZBY, of Shamong, in the county of Burlington and State of New Jersey, have invented an Improvement in Means for Supplying Railroad-Tanks with Water, of which the following is a specification:

This invention relates to certain improvements in that class of devices for supplying railroad-tanks with water, in which the wheels of a passing train act upon levers alternately for moving the pistons of pumps. This invention has for its object to render such class of apparatus more reliable and perfect in operation, and extremely simple in construction. The improvements are fully hereinafter described and pointed out in the claim.

In the accompanying drawing, Figure 1 represents a horizontal section on the line *x x*, showing my invention as applied to a railroad-track; Fig. 2, a partly vertical section of the same through the line *y y*, looking in direction of the arrow *z;* and Fig. 3 a similar sectional view through the line *y y*, looking in direction of the arrow *w*, and showing the track with my system of levers applied; also a truck of a passing train as operating thereon.

A A′ represent the rails of a railroad-track; and B an elevated tank, into which the water is required to be pumped, by the action of a passing train, for supplying, as required, the locomotives or tenders of the trains with water. Arranged alongside the one rail, A, preferably on the outside thereof, are two levers, C C′, having their fulcrums *b b′* near their back or outer ends, and with their inner or free ends resting on a cam composed of toes or lifters *d d′*, attached to a rock-shaft, D, on opposite sides of the latter. The upper surfaces of the free ends of these levers are formed with double or reverse inclines *c e′*, to provide for their action, by passing trains, in opposite directions of travel. Said inclines project sufficiently upward to be struck or borne down upon by the several wheels of a train passing over the rail A whenever either toe or lifter *d d′* has been raised by the motion of the rock-shaft D, as clearly illustrated in Fig. 3, either lever C C′ being raised, alternately, by the depression of the other lever, whereby a nearly-continuous rocking action of the shaft D is kept up, and each wheel, in succession, is caused to operate first upon the one lever, and then on the other. This not only gives a quick or frequent rocking action to the shaft D, which works the pumps E E that supply the tank B, the several wheels throughout the train on the lever side of the track acting successively on both levers, and each wheel producing a whole double movement of the rock-shaft, so that not only is a positive motion obtained for both, or reverse strokes of the plungers of the pumps, but a much larger effect—that is, a greater number of pump-strokes during the passing of a train—than when, as in other apparatus for a like purpose, a counterpoise, which descends slowly, is used to give a return action to the pumps. I dispense, also, with all rising and falling rail-sections, and keep the rails of the track intact, and simplify the construction of the apparatus as a whole.

As the levers C C′ are arranged in the drawing, they are actuated by the tread of the wheels G of the train, to insure which an inside guard-rail, H, may be placed within the track to prevent the wheels from passing without rolling over.

Either or both of these levers C C′ are hung so as to admit of their being moved laterally—as, for instance, by hand-levers J—out of the way of the wheels of the passing vehicles, as shown by dotted lines for the lever C in Fig. 1. This is done whenever it is necessary to allow a train to pass without operating the pumps.

I am aware that rocking levers have been provided on the side of the rail of a railroad-track, so that the car-wheels will depress the ends of the levers alternately for oscillating a vertical shaft which is connected with the horizontal shaft on which the levers are fixed, said vertical shaft communicating motion to the pistons of pumps arranged horizontally on the side of the track, this being accomplished by providing the vertical shaft with pawls, which mesh with pinions having crank-arms

connecting with the piston-rod of the pump, so that the said pawls revolve the pinions, and reciprocate the pistons.

I claim—

The laterally-adjustable levers C C′, pivoted at their rear ends, and provided at their opposite ends with double or reverse inclined surfaces *e e′*, as described, in combination with the rock-shaft D, having the toes or lifters *d d′* on each side thereof, for alternately raising and lowering the levers C, substantially as herein shown and described, for directly imparting a reciprocating motion to the piston of a pump, as set forth.

EDWARD BUZBY.

Witnesses:

DANIEL BREWER,

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