

T. RODES.

Means for Raising Water into Railroad-Tanks.

No. 166,556.

Patented Aug. 10, 1875.

Fig: 1.

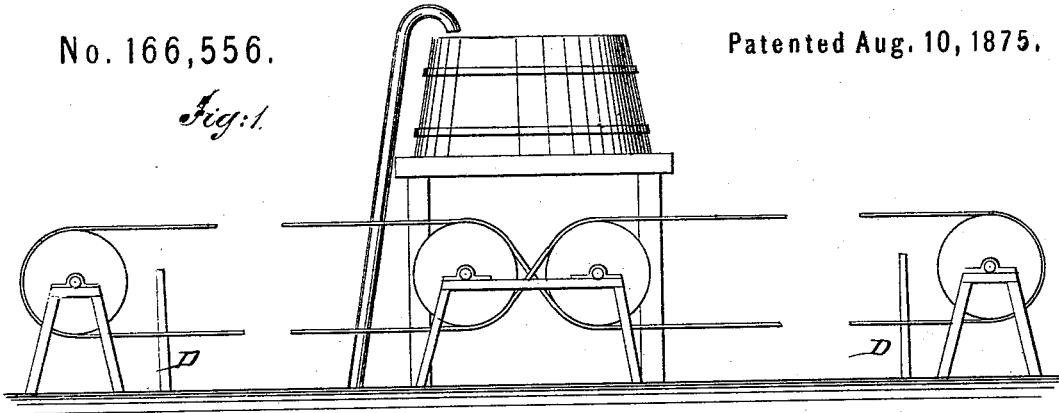


Fig: 2.

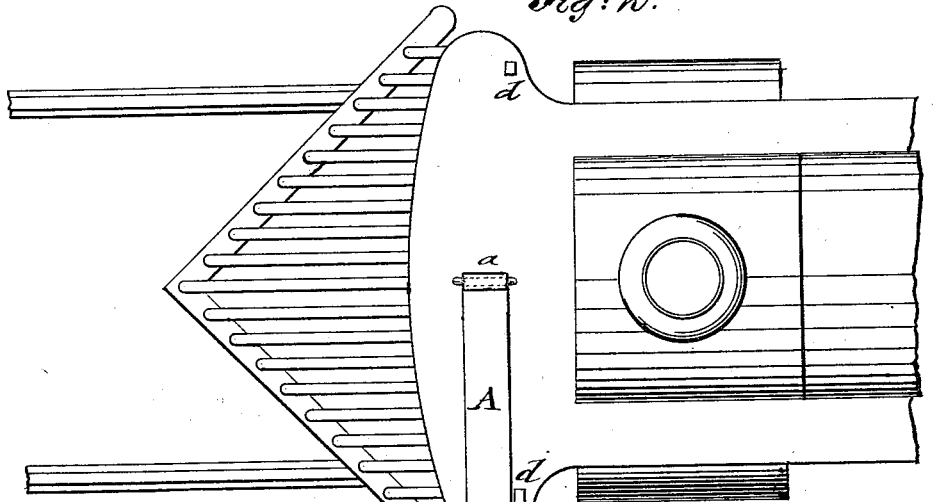
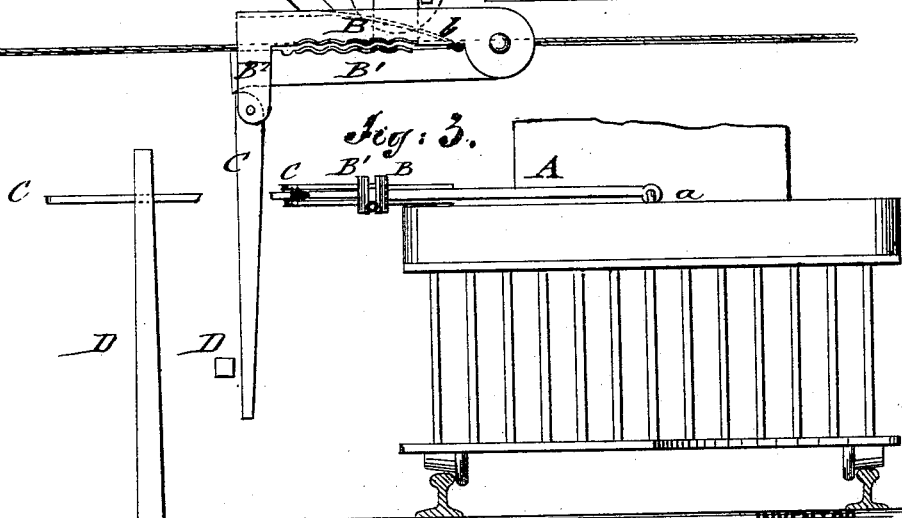


Fig: 3.



WITNESSES:

*Chas. Nida*  
*A. J. Perry*

INVENTOR:

BY

*T. Roden*  
*Mumford*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

TYREE RODES, OF WALES STATION, TENNESSEE, ASSIGNOR TO HIMSELF  
AND T. A. ATCHISON, OF SAME PLACE.

## IMPROVEMENT IN MEANS FOR RAISING WATER INTO RAILROAD-TANKS.

Specification forming part of Letters Patent No. **166,556**, dated August 10, 1875; application filed April 3, 1875.

*To all whom it may concern:*

Be it known that I, TYREE RODES, of Wales Station, in the county of Giles and State of Tennessee, have invented a new and Improved Device for Raising Water into Railway-Tanks, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of a railway-tank with wire-rope and running-gear for raising water. Fig. 2 is a top view of a locomotive with my improved wire-rope grapple attachment, and Fig. 3 an end view of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a cheap and effective device for raising water into railway-tanks by the action of the locomotive, without interfering with the running of the trains; and the invention consists of a grapple attachment, which is hinged to the cow-catcher beam, and used at either side of the locomotive, the grapple taking hold of a wire-rope stretched on running-gear along the track, and operating thereby the tank-pump, until a post near the end of running-gear strikes the clamping-lever and drops the wire-rope.

In the drawing, A represents the main arm of the grappling attachment, which is preferably hinged to a central staple of the cow-catcher beam of the locomotive, to be swung to either side, as required. At the end of arm A is applied, at right angles thereto, and projecting at suitable distance beyond the front beam, a piece, B, with vertically-corrugated jaw extending above and below the same. A second piece, with corresponding jaw B<sup>1</sup>, is pivoted to the rear end of piece B, and acted upon by a band-spring, b, of piece B, so as to force the jaw B<sup>1</sup> in outward direction. The free end of jaw B<sup>1</sup> slides in the double guide-extension B<sup>2</sup> of the piece B, to the end of which an eccentric lever, C, is pivoted, which admits, when in position alongside of the jaw, the spreading apart of the same by the spring as far as extension B<sup>2</sup> will permit, but which closes,

on being swung in an outward direction at right angles to the jaws, the same firmly to each other. A lug, d, of the cow-catcher beam forms a supporting-bearing for the grapple, and secures the rigid position of the same. The grappling attachment is applied to a wire-rope mounted symmetrically and parallel to the track on four supporting-wheels, in both directions from the tank, as indicated in Fig. 1.

When the tender is in front of the water-tank to take water the grapple of the locomotive is at some distance forward of the same, and is there attached to the wire-rope by swinging the eccentric lever in outward direction. When the locomotive moves off, the rope will be pulled with the same and work the running-gear, and thereby the pump, until the locomotive arrives at the end of the wire-rope, where a post, D, comes in contact with the lever C, strikes against the same, and releases the rope from the jaws of the grapple without interrupting the motion of the locomotive.

The wire-rope running-gear has to be of sufficient length at each side of the tank to raise the same quantity of water taken up by the tender, or more, back into the tank by the action of the locomotive, without interfering with the usual running of the trains, and without requiring special engines and attendance for working the pumps at tank-stations.

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

1. As an improved device for raising water into railway-tanks by the action of the locomotive without interfering with the running of the trains, a swinging and adjustable grappling attachment to the locomotive, in combination with a wire-rope running-gear, parallel to the track at both sides of the tank, and with detaching-posts near each end of running-gear, all being arranged and operated substantially as and for the purpose set forth.

2. The grappling attachment to locomotives

for raising water into the tank, composed of hinged main arm with lateral supporting jaw-piece, pivoted and spring-acted clamping jaw-piece, and eccentric locking-lever, substantially as described.

3. The combination of swinging grappling attachment, hinged centrally to cow-catcher

beam of locomotive, with supporting lugs or rests at each side of the same, for the purpose specified.

TYREE RODES.

Witnesses:

J. J. LINDSAY,

T. H. MEREDITH.