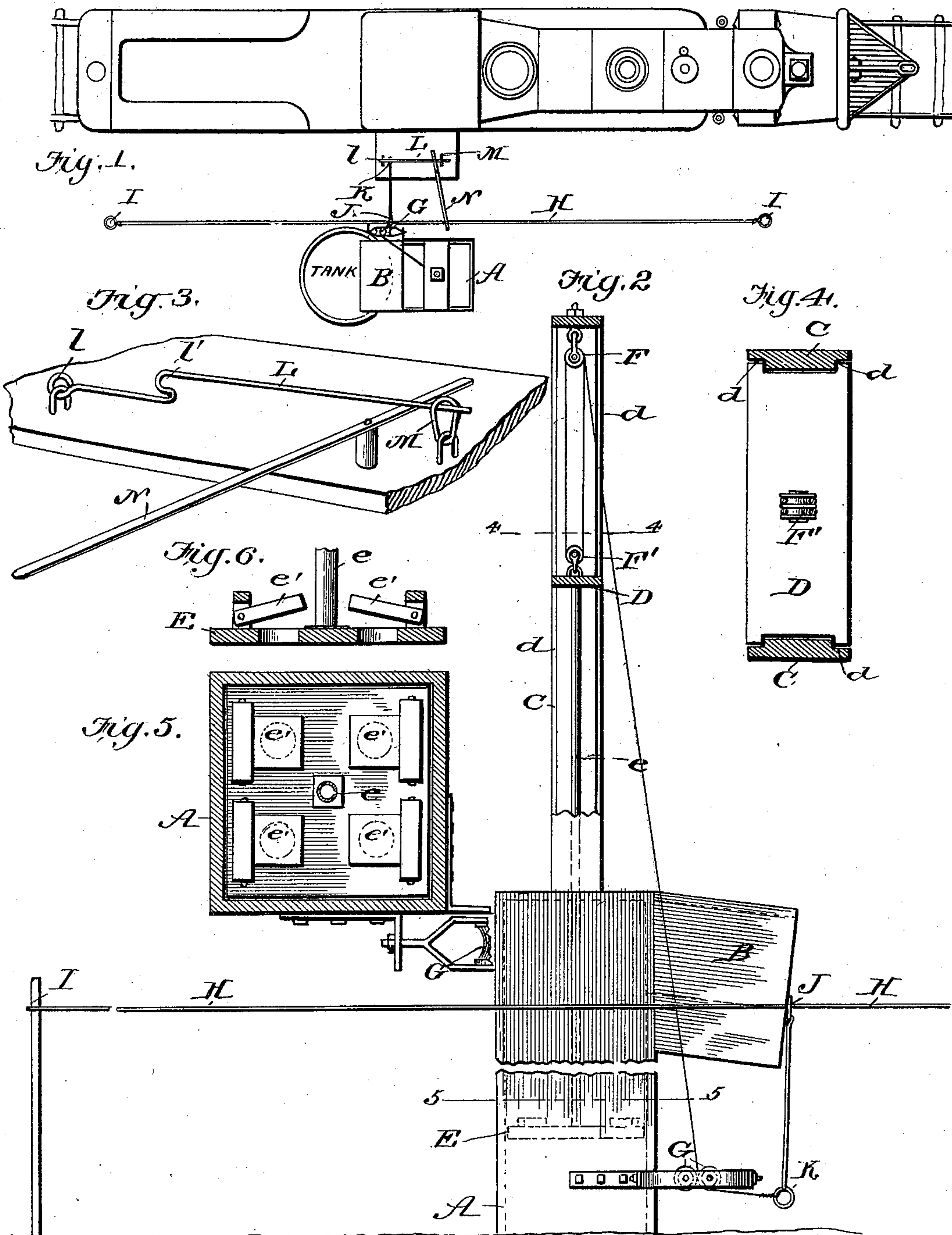


(No Model.)

W. M. STEVENSON & W. K. BAILEY.  
WATER TANK.

No. 602,373.

Patented Apr. 12, 1898.



WITNESSES:

Jos. A. Ryan  
P. B. Zerpier

INVENTORS  
William M. Stevenson  
William K. Bailey  
BY Munn & Co.

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLIAM M. STEVENSON AND WILLIAM K. BAILEY, OF HONEY GROVE,  
TEXAS.

## WATER-TANK.

SPECIFICATION forming part of Letters Patent No. 602,373, dated April 12, 1898.

Application filed June 16, 1897. Serial No. 641,016. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM M. STEVENSON and WILLIAM K. BAILEY, of Honey Grove, in the county of Fannin and State of Texas, have invented a new and useful Improvement in Water-Tanks, of which the following is a specification.

This invention is an improvement in water-tanks for railways, and has for an object, among others, to provide a simple construction by which the train may be utilized to lift the water from the well to the tank; and the invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a top plan view of our invention. Fig. 2 is a front view thereof, parts being broken away and others shown in section. Fig. 3 is a detail view of the tripping devices on the locomotive. Fig. 4 is a cross-section on about line 4 4 of Fig. 2. Fig. 5 is a cross-section on about line 5 5 of Fig. 2, and Fig. 6 is a detail sectional view of the plunger.

In carrying out our invention we provide a large upright tube A, either rectangular or round or of other suitable cross-section, which extends at its lower end into the well or other depressed water-supply. At its upper end the tube or barrel A has a discharge-spout B, by which it delivers the pumped water to the tank, suitably placed alongside the track. The barrel A and its spout B may be of wood, metal, or other suitable material.

Above the barrel we arrange a derrick-like frame C, whose side beams are provided with guides *d* for the cross-head D, to which is connected by a rod or cable *e* the plunger E, which operates in the pump-barrel A and may be lifted by the upward movement of the cross-head and will fall of its own weight, being suitably valved at *e'* to permit it to descend.

The rod E is preferably tubular or hollow, as shown in Fig. 5, and operates to admit air beneath the plunger, which releases the water below the plunger, so the upward movement of such plunger will not be retarded or resisted by the water beneath, making it much easier to draw the water.

A tackle-block F is suspended from the top of the derrick, and a similar block F' is connected with the cross-head, and the pumping-cable is disposed through said blocks F F', thence between guide-pulleys G G, and is connected at its end with the locomotive in the manner presently described.

Alongside the track for some distance to both sides of the pump and tank we arrange a wire or rod line H, supported at its ends on posts I and forming a guide for the pumping-cable, the posts I forming abutments for the tripper, presently described.

The cable has a link or ring J, sliding on the wire H, and a link or ring K, which connects with the locomotive.

In connecting the ring K with the locomotive we provide the latter with a link-securing bar L, pivoted at one end *l*, having a seat *l'* for the ring K between its ends, and arranged at its other or free end to receive the ring K and to be held by the pivoted loop or ring M, which is arranged to be forced off the bar L by the tripper N. This tripper N is a lever pivoted between its ends to the locomotive, arranged at one end to release the loop M and at its other end to engage the posts I.

In operation the train approaching from either direction may be stopped at the tank and the pumping-cable be connected with the locomotive by fitting its ring K over the securing-bar and securing the latter, as before described. Then as the locomotive moves forward the pumping will be proceeded with by lifting the column of water above the plunger until the tripper strikes the post I, when the cable will be detached from the locomotive and will be guided back along the guide-wire H as the plunger descends.

We prefer to make the connection *e* with the plunger hollow to prevent suction as the plunger rises.

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

1. An apparatus substantially as described comprising the pumping devices, the guide-line alongside the same, the posts at the ends of said guide-line, the pumping-cable having a ring sliding on the guide-wire and a second

ring for connection with the locomotive, the locomotive having a bar for securing said second ring such bar being pivoted at one end, a pivoted link by which to secure the other  
5 end of the bar and a lever pivoted to the locomotive and arranged at one end to engage the posts at the end of the guide-line and at its other end to trip the link from engagement with the securing-bar substantially as described.  
10 scribed.

2. In an apparatus substantially as described, the combination with the locomotive of a cable-securing bar pivoted at one end and bent between its ends into hook shape forming a seat for the cable-ring, a link for secur-

ing the other end of said bar and a tripper for releasing said link substantially as described.

3. The combination with the locomotive and the pumping-cable having a ring, of the securing-bar on which the said ring is loosely  
20 fitted said bar being pivoted at one end, a latch for securing the opposite end of the bar, and a tripper for releasing said latch substantially as described.

WILLIAM M. STEVENSON.  
WILLIAM K. BAILEY.

Witnesses:

J. D. BEDFORD,  
W. WALTERMAN.