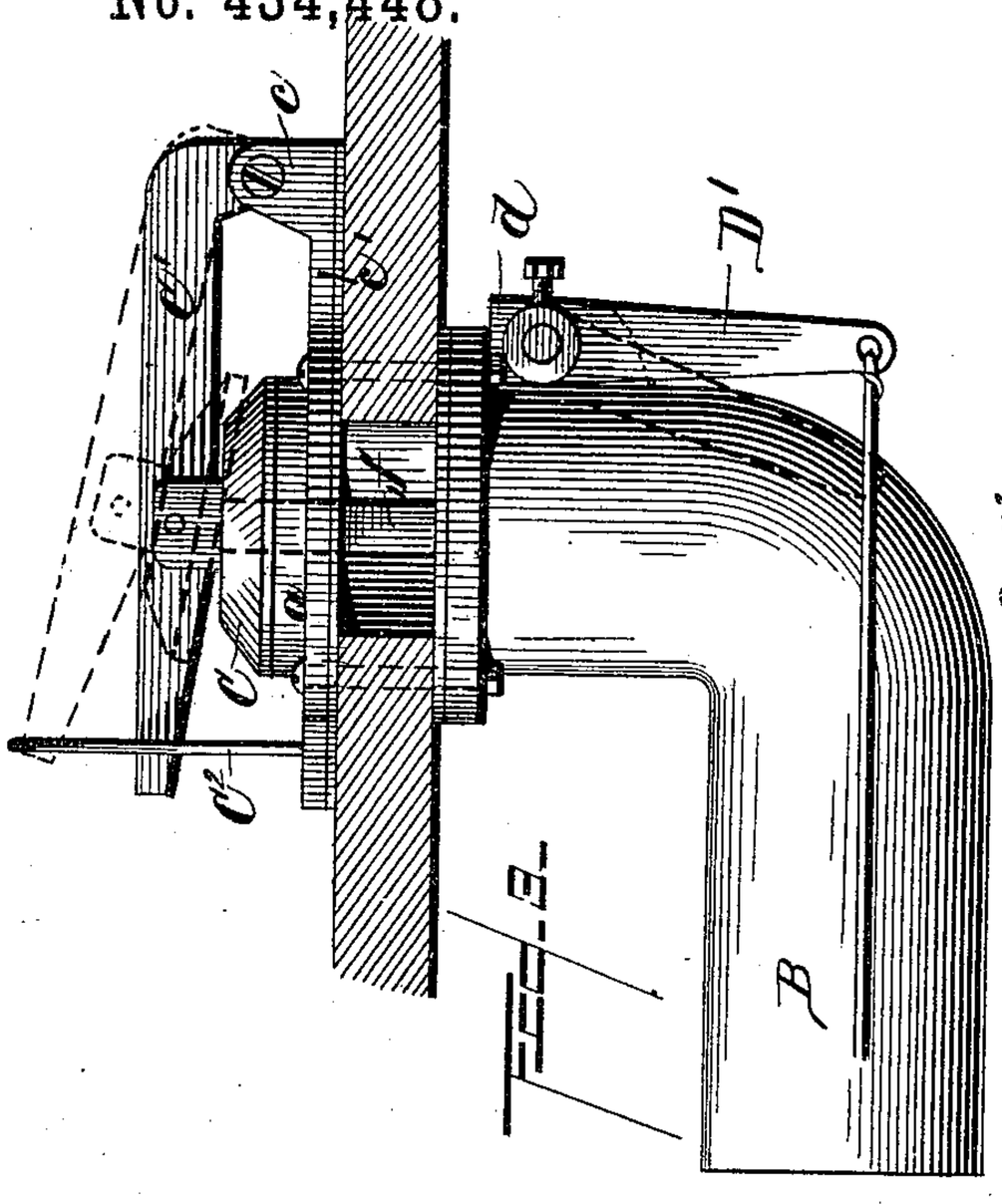
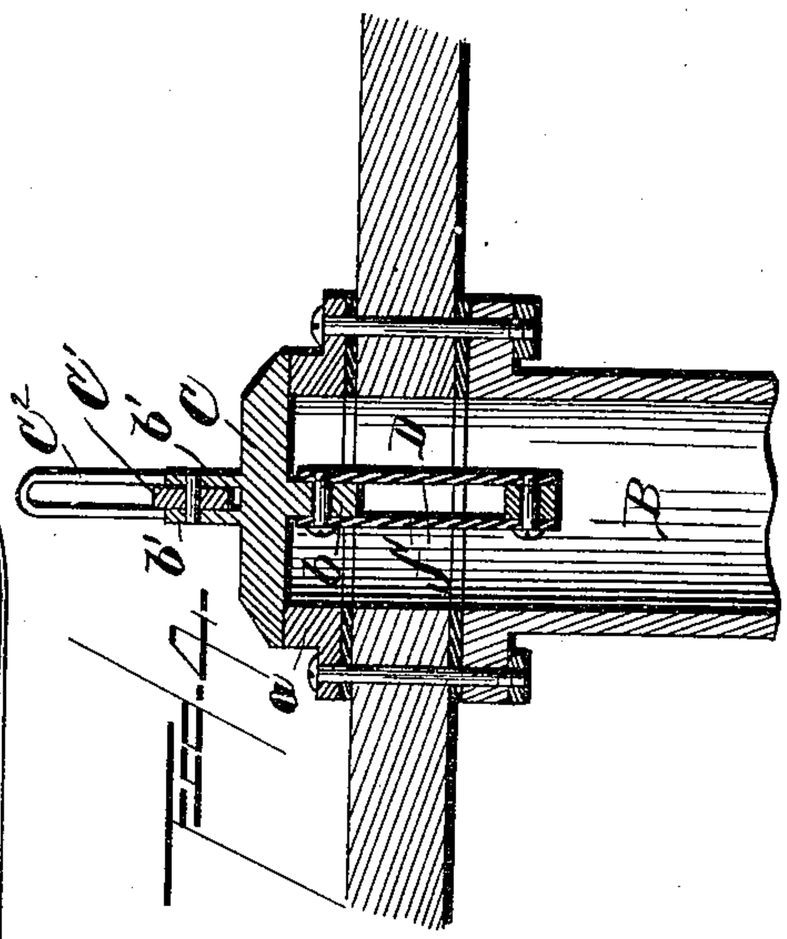
(No Model.) 2 Sheets—Sheet 1.

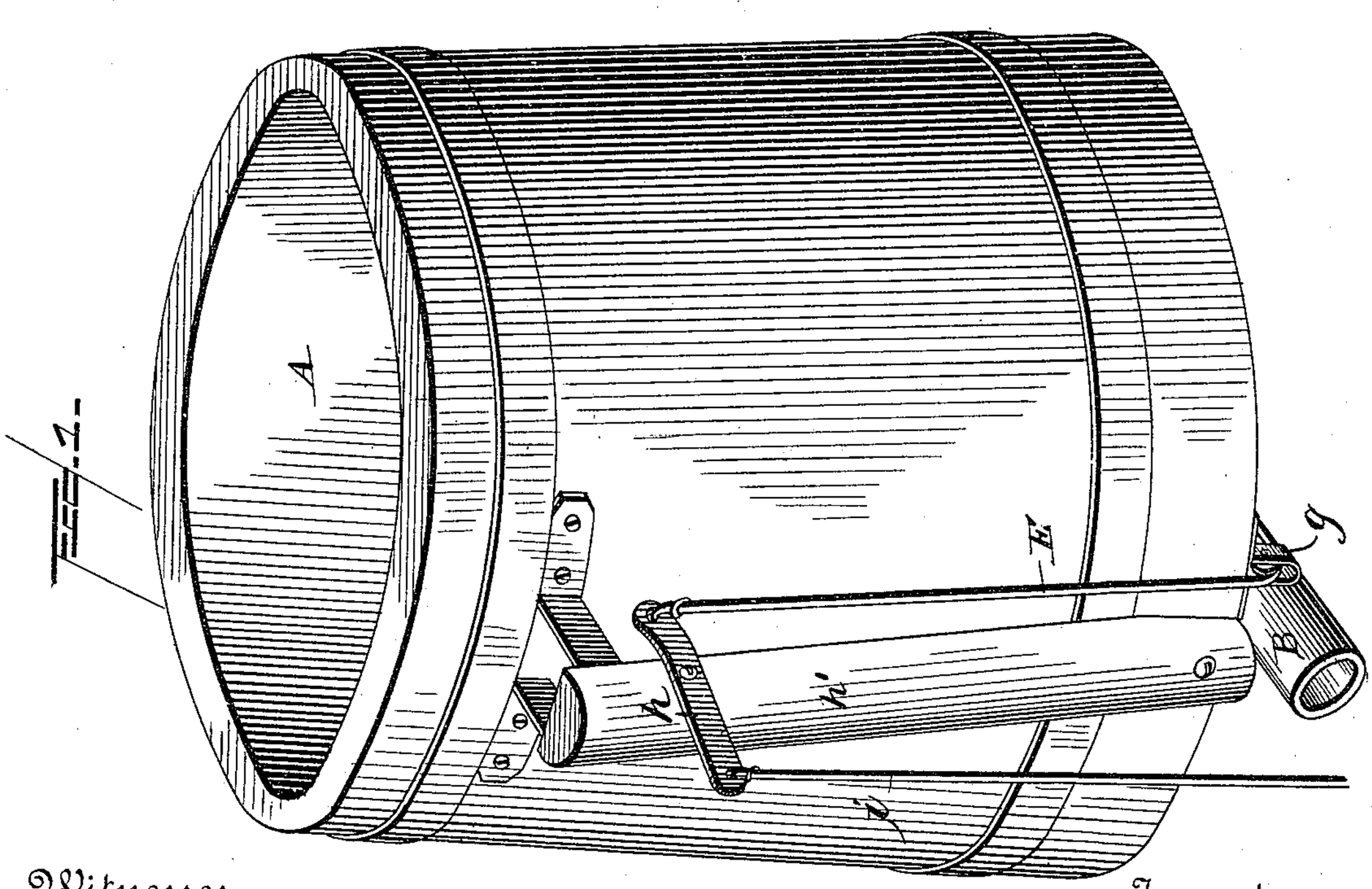
R. W. JACKSON.

WATER TANK.

No. 434,448. Patented Aug. 19, 1890.







Witnesses

Henry G. Dieterich

Wm. J. Littell

Inventor:

Rolly W. Jackson,

By his Attorney

J. R. Littell,

(No Model.) 2 Sheets—Sheet 2.

R. W. JACKSON.

WATER TANK.

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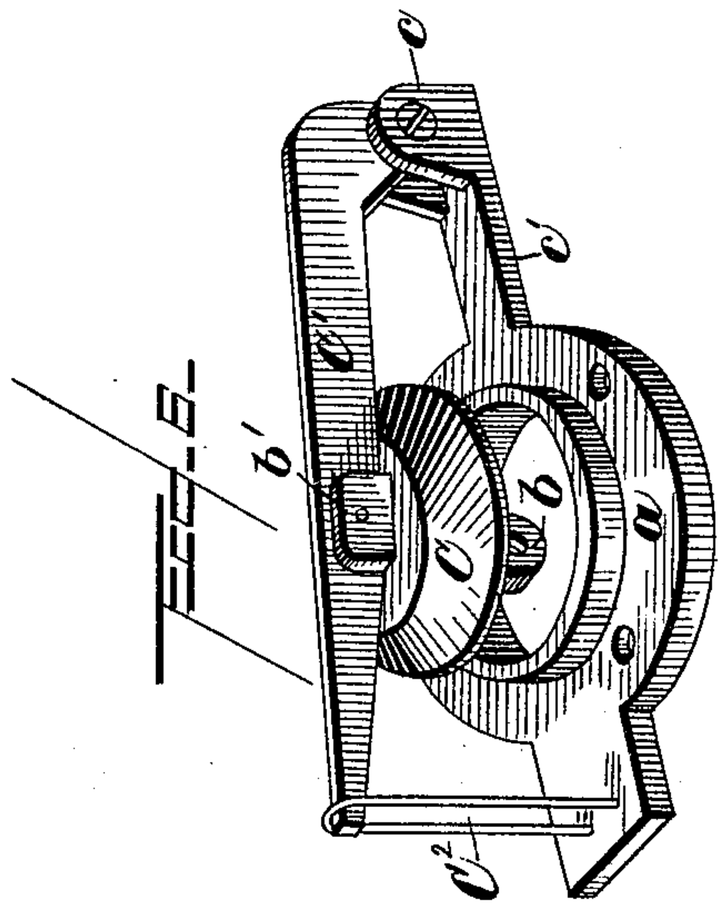

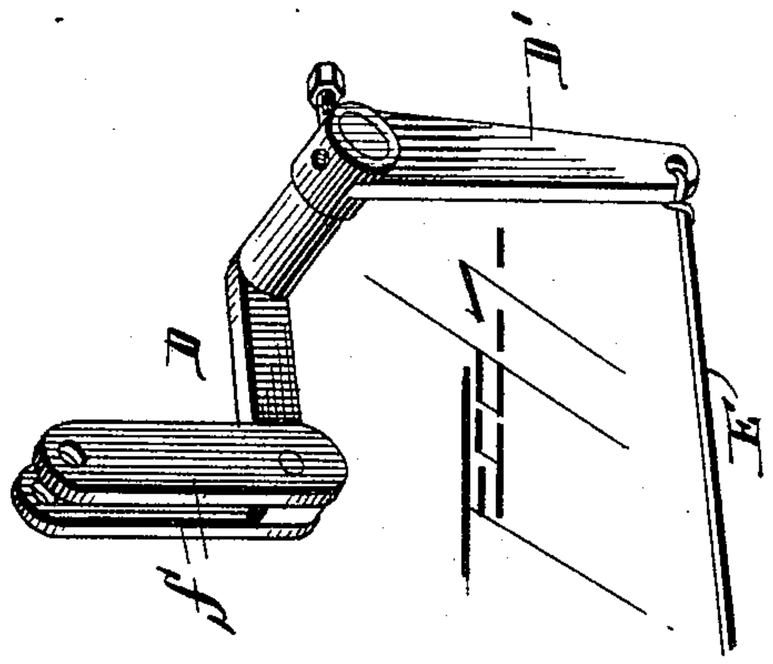

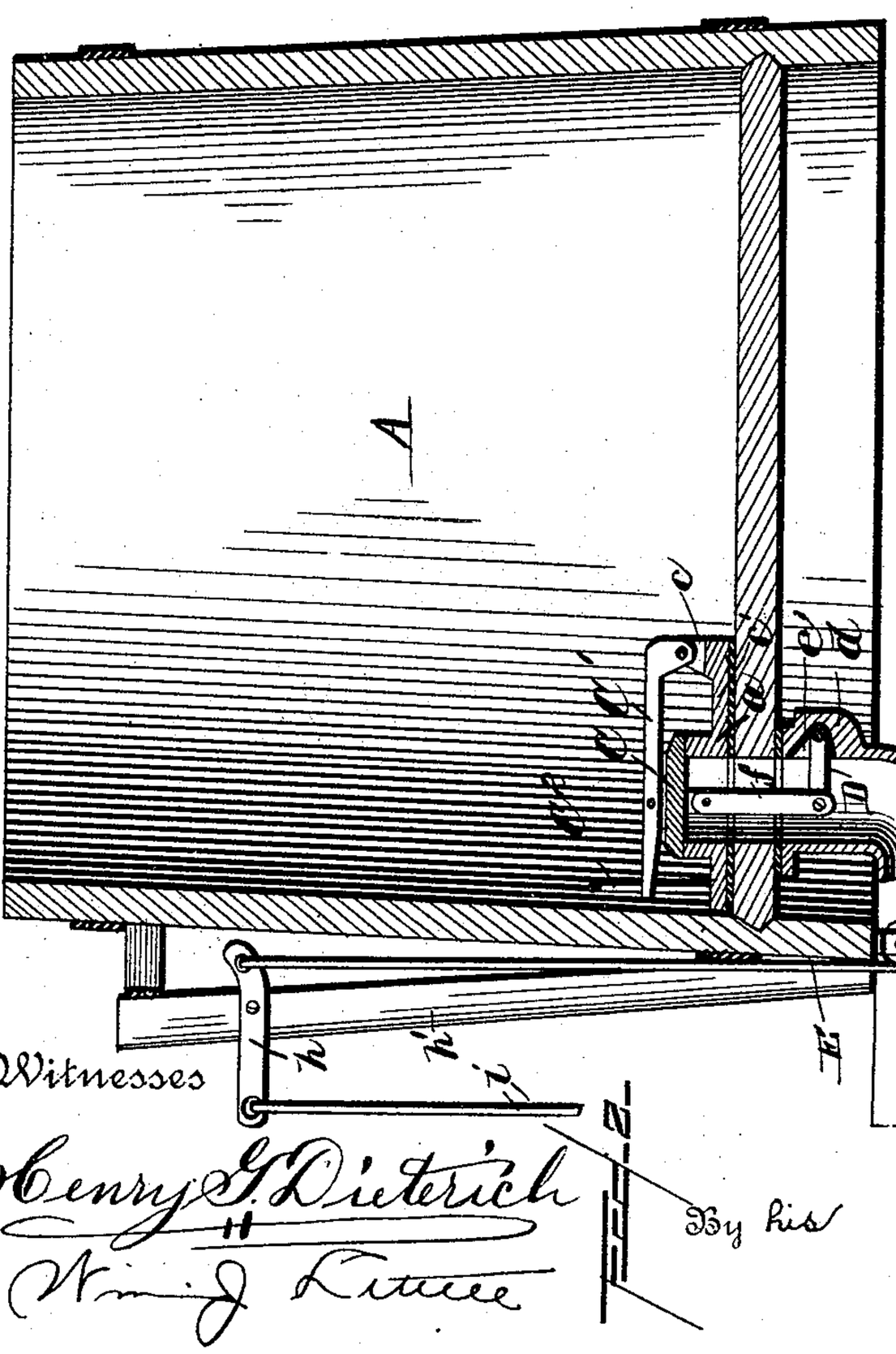

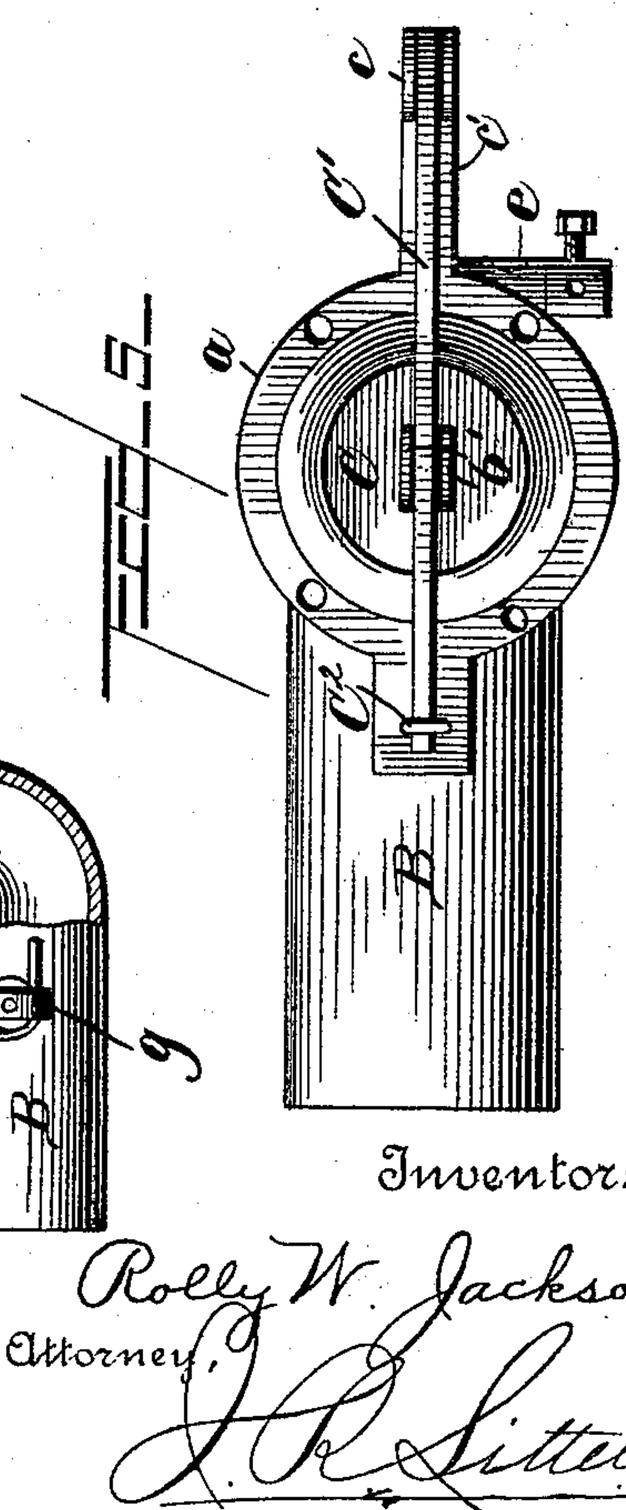

Witnesses

Henry G. Dieterich

Wm. J. Lawee

By his

Attorney,

Inventor:

Rolly W. Jackson,

L. R. Littell.

UNITED STATES PATENT OFFICE.

ROLLY W. JACKSON, OF HUME, ILLINOIS.

WATER-TANK.

SPECIFICATION forming part of Letters Patent No. 434,448, dated August 19, 1890.

Application filed August 17, 1889. Serial No. 321,070. (No model.)

To all whom it may concern:

Be it known that I, ROLLY W. JACKSON, a citizen of the United States, residing at Hume, in the county of Edgar and State of Illinois, have invented certain new and useful Improvements in Railway Water-Tanks, of which the following is a specification.

This invention relates to certain improvements in railway water-tanks; and it consists of the novel construction and combination of parts, whereby the water-discharge valve is prevented from becoming inoperative in the event of the freezing of the water in the tank.

In the drawings, Figure 1 is a perspective view of a water-tank embodying my invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a detail side elevation of the valve and adjacent operating mechanism. Fig. 4 is a vertical transverse sectional view thereof. Fig. 5 is a top or plan view of the same. Figs. 6 and 7 are detail perspective views of the valve and the adjacent operating mechanism respectively, the same being detached.

Corresponding parts in the figures are denoted by the same letters of reference.

In carrying out my invention I employ the usual water-tank A and the discharge-pipe B, which, as usual, is applied to the bottom of the former, its inner end extending up through the bottom and suitably bolted thereto, and over it is secured or bolted the valve-seat *a*. The valve-seat *a* is preferably circular, and of the same diameter as the bore of the pipe B.

C is the valve, which is a plate or disk, and having projecting from its upper and its lower surfaces studs *b b'*.

C' is the valve-stem or lever pivoted at one end between and to studs *c* upon an extension *c'* of the valve-seat. The opposite end of said valve-stem or lever C' is guided in its movement and prevented from vertical or upward displacement by a bail or keeper C^2, preferably secured or embedded at its lower ends in an additional extension *c'* of the valve-seat diametrically opposite the extension *c*. The valve-stem or lever C' is also pivoted a little forward of its center between the studs *b' b'* of the valve C.

D is an angle-lever, which bears in a hollow arm or bearing *d*, secured to one side of a chamber or extension *e* of the upwardly-extended portion of the pipe B, said lever also bearing at its extreme inner end in a recess or socket *e'* in one side of said chamber. From this arrangement it will be seen that the pivotal point of the lever D, which actuates the valve, as presently disclosed, is outside of the water-tank, and will therefore not be affected by or in event of the freezing of the water in the latter. One arm of the lever D is connected by a link or links *f* to the valve C, the link or links having connection with the pendent stud *b* of the valve. The outer end of the lever D is provided with an arm or handle D', to which is connected a cord or line E, passing and guided over a pulley *g*, hung at the bottom edge of the tank A, said line then being carried up and connected to one end of a centrally-pivoted lever *h*, suitably supported upon an upright or bracket *h'*, secured, it may be, in position as shown. From the outer or opposite end of the lever *h* depends a second line *i* within convenient reach of the operator, by the pulling of which latter line the valve C is readily operated or opened, it closing by gravity.

I claim as my invention—

1. In a water-tank, the combination, with the valve-seat, the valve pivotally connected therewith, means for limiting the upward movement of the valve, and a discharge-pipe, of valve-operating mechanism consisting of an angle-lever journaled in the discharge-pipe and links disposed in the latter and pivotally connecting the lever with the valve, substantially as and for the purpose set forth.

2. In a railway water-tank, the combination of the valve, the valve-seat, the discharge-pipe having an extension-chamber, and the valve-actuating angle-lever linked to said valve and bearing in said chamber and in a sleeve or hollow bearing projecting from said chamber, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ROLLY W. JACKSON.

Witnesses:

S. J. WARD,

JOEL A. COOPER.