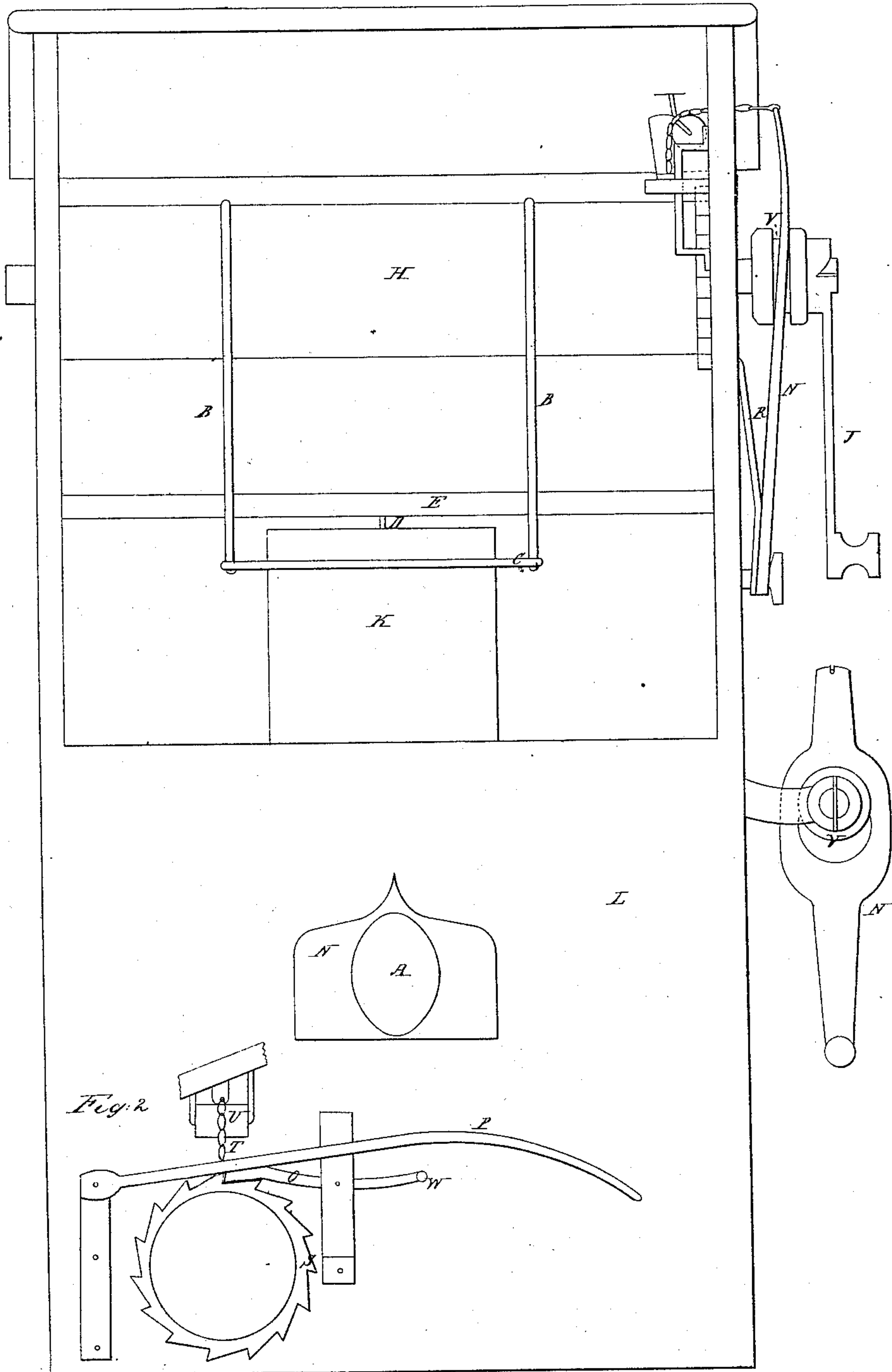


J. LEE.  
WATER ELEVATOR.

No. 32,632.

Patented June 25, 1861.

*Fig 1*



*Fig 2*

Witnesses  
M. J. Ford  
G. W. Ford

Inventor  
J. Lee

# UNITED STATES PATENT OFFICE.

JOEL LEE, OF GALESBURG, ILLINOIS.

## WATER-ELEVATOR.

Specification of Letters Patent No. 32,632, dated June 25, 1861.

*To all whom it may concern:*

Be it known that I, JOEL LEE, of Galesburg, Knox county, and State of Illinois, have invented new and useful Improvements in Water-Drawers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a front view. Fig. 2 is a transverse section of the internal arrangement at the end of the drum. Fig. 3 is a front view of the slotted lever and the grooved crank detached.

The nature of my improvements consists, 1, in furnishing a slotted lever and brake for the purpose of unclutching the crank; 2d, in raising the catch out of the ratchet by the downward movement of the brake; 3d, in furnishing a spring in combination with the slotted lever by which the crank is re-clutched and the brake raised from the catch so as to permit it to fall into the ratchet; 4th, in so arranging a horizontal bail or hoop as to keep the bucket perpendicular and to avoid obstructions to dipping water therefrom when necessary.

To enable others skilled in the art to make and use my improvements I will proceed to describe their construction and operation.

N is the slotted lever.

O is the catch.

P is the brake.

35 R is the spring.

S is the ratchet.

T is the chain.

U is the pulley.

V is a groove in the crank.

40 E is the bumper.

C is the horizontal bail.

W is the right angle at the front end of the catch.

The brake is first brought down on the top of the drum and being connected with the slotted lever by the chain which passes over the pulley and the lever being connected with the crank by its slot fitting into the groove of the crank the crank is drawn along the journal a sufficient distance to

disengage it from the pin in the end of the journal unclutching it before the catch is raised out of the ratchet thus securing the operator against injuries from the backward revolution of the crank while the bucket is descending. The next result of the downward motion of the brake is raising the catch out of the ratchet, by coming in contact with the right angle at its front end. Simultaneously with the above the brake has reached the top of the drum to control the descent of the bucket. By simply removing the hand from the brake the spring acting on the slotted lever brings the slot in the end of the crank in contact with the pin, thus re-clutching it, at the same time the catch being relieved by the ascent of the brake falls by its own weight into the ratchet (its rear end being heaviest) so that no accident can arise to the operator by neglecting to replace it.

The horizontal bail or hoop is used as an equalizer. It is pivoted by two opposite sides to the bucket at or near its top and the other sides being elongated afford sufficient play to the bucket to keep it perpendicular, this arrangement also leaves the top of the bucket unobstructed, so that small quantities of water may be dipped from it if required.

The bumper is placed horizontally below the drum, not only is the valve rod pressed against it thereby opening the valve, but the rear edge of the bucket also as it ascends which has the effect to incline the bottom forward and permit the spout to reach within the aperture in the curb, thus rendering the discharge from the bucket into the receiving pail more complete.

What I claim as my invention and desire to secure by Letters Patent is,

1. The slotted lever N, in combination with the brake P, for the purpose of unclutching the crank as described.

2. The combination and arrangement of the pawl O, and brake P, as described and for the purpose set forth.

3. The spring R in combination with the slotted lever N, for the purpose of clutching the crank and raising the brake from

the catch thereby permitting it to fall into the ratchet as described.

4. In combination with the foregoing enumerated devices a horizontal bail or  
5 hoop placed at or near the top of the bucket K, for the purpose of preserving the equilibrium of the bucket and affording conven-

ience in dipping small quantities of water therefrom when desired, as described.

JOEL LEE.

Attest:

WM. M. MORTLEY,  
G. W. FORD.