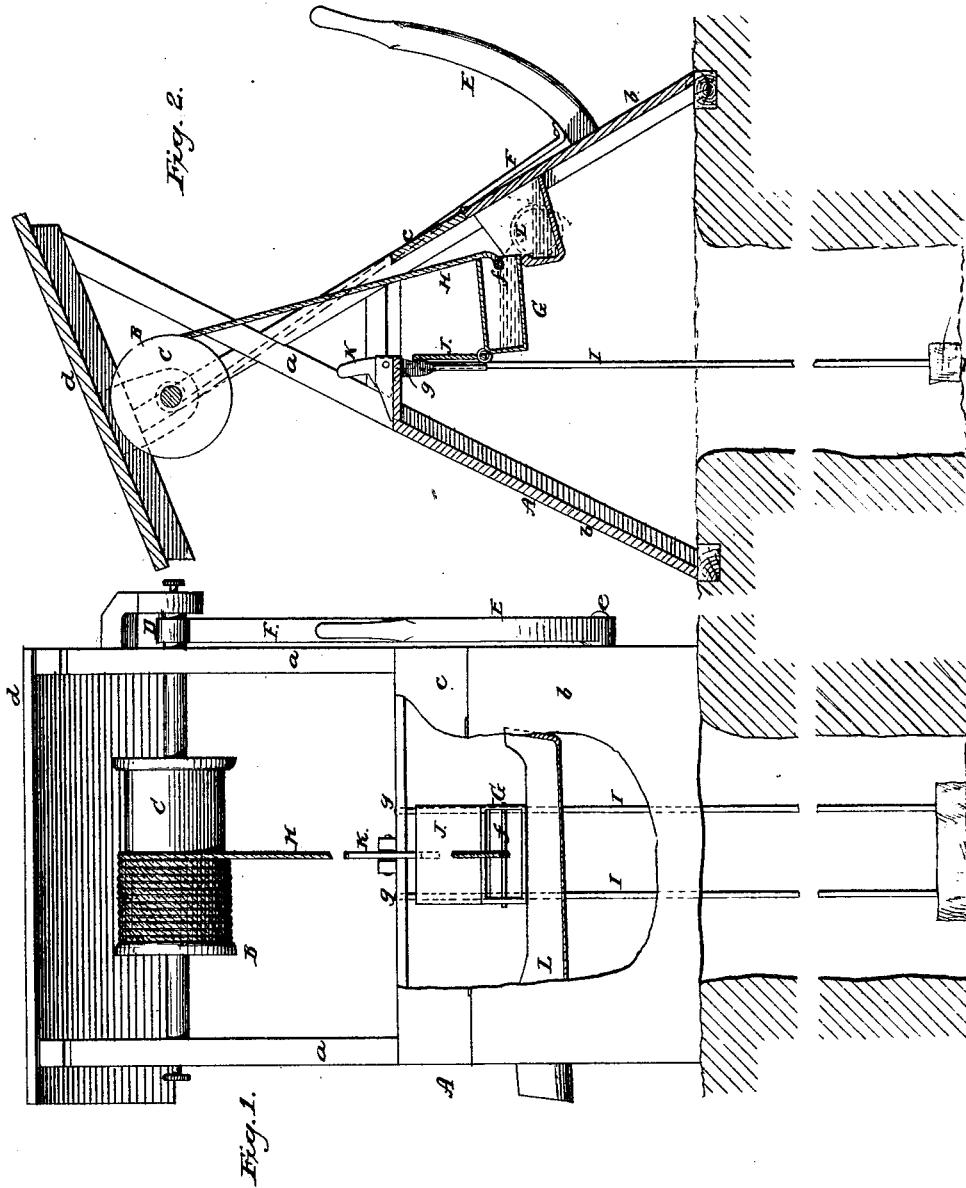


T. J. REID.  
 WATER-ELEVATOR.

No. 185,783

Patented Dec. 26, 1876.



WITNESSES:

*Geo. H. Chas. A. Scarborough*

INVENTOR:

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BY

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# UNITED STATES PATENT OFFICE

THOMAS J. REID, OF LEXINGTON, INDIANA, ASSIGNOR TO HIMSELF AND JOHN MALICK, OF SAME PLACE.

## IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. 185,783, dated December 26, 1876; application filed December 4, 1876.

*To all whom it may concern:*

Be it known that I, THOMAS J. REID, of Lexington, in the county of Scott and State of Indiana, have invented a new and Improved Water-Elevator, of which the following is a specification:

Figure 1 is a front elevation of my improved water-elevator, with portions broken away. Fig. 2 is a side elevation, in part section.

Similar letters of reference indicate corresponding parts.

My invention relates to that class of elevators that employ a windlass and bucket for raising water; and it consists of a windlass provided with two drums, of different diameter, journaled in the upper portion of the curb. Upon the larger drum a rope is wound, by which the bucket is raised or lowered, and upon the smaller drum a strap is wound in a contrary direction, which is attached to a curved lever, by which the elevator is operated.

It further consists in the peculiar arrangement of wire guides for the buckets, that extend from the top to the bottom of the well, and in a slide that runs upon the said wires, and to which the bucket is hinged, and also in a catch that receives and retains the slide when the water is emptied from the bucket.

Referring to the drawing, A is the curb, which consists in the frame *a*, covered with the side pieces *b*, and provided with the hinged portion *c* and roof *d*. B is a windlass, that is journaled in the upper portion of the frame *a*, and consists of a large drum, C, and a smaller drum, D.

E is a curved lever, that is pivoted to the side of the curb at *e*, and to which the strap F is attached. The said strap is attached to, and wound around, the smaller drum D of the windlass.

G is a bucket, which is rectangular in form, and is provided with a fixed bail or cross-bar, *f*, to which a rope, H, is attached, that is wound upon the drum C of the windlass in a direction contrary to that in which the strap F is wound

upon the smaller drum, so that a downward pressure of the lever E by drawing the strap F rotates the windlass, and winds the rope H, raising the buckets. I I are wires attached to the curb at *g*, and to some fixed object at the bottom of the well, and J is a guide, that slides upon the wires, and is hinged to the bottom of the bucket. K is a catch, that is pivoted in the cross-piece of the curb between the wires I I, and is capable of engaging a lip formed on the guide J. L is a spout, into which the bucket G empties, and which delivers the water outside of the curb.

When the bucket is suspended wholly by the rope, it is vertical, and its mouth opens upward. It is lowered in this position into the water, and when filled it is raised by pressing downward on the curved lever E with the hand or foot, or both, rotating the windlass, and winding the rope H. When the bucket reaches the upper ends of the wires, the guide J is engaged by the catch K, when the lever E is released, and the bucket tips by its own gravity, and delivers the water to the spout L. The wires guide the bucket, so that it moves steadily from the top to the bottom of the well, and when the bucket has delivered the water to the spout it is in a position for drying, and does not become water-soaked and corroded.

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

1. The combination of the wires I, guide J, catch K, and bucket G, substantially as herein shown and described.

2. The combination of the curved lever E, strap F, windlass B, rope H, and bucket G, substantially as herein shown and described.

THOMAS J. REID.

Witnesses:

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