T. GAMBLE & J. WAGNER.

WATER ELEVATOR.

No. 190,845. Patented May 15, 1877.

Fig. 1.

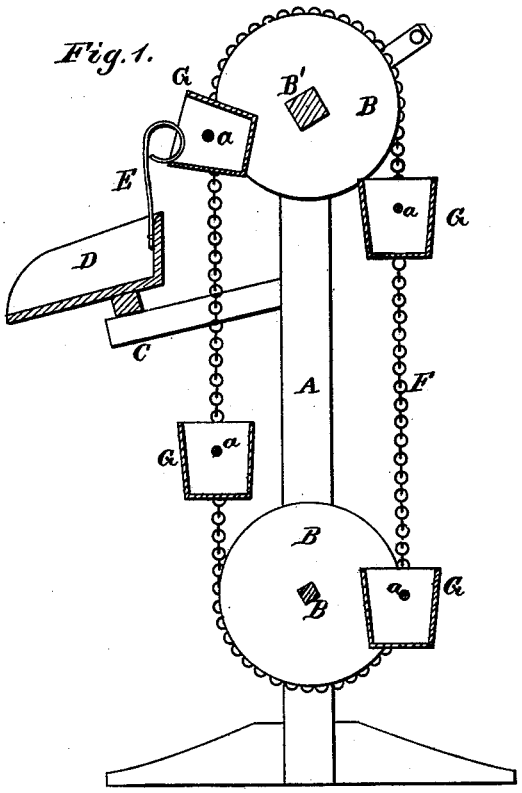
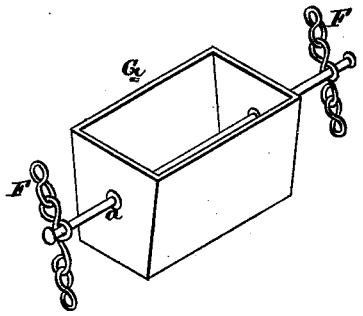


Fig. 2.



WITNESSES

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THOMAS GAMBLE AND JEREMIAH WAGNER, OF MARTINSVILLE, ILLINOIS.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. **190,845**, dated May 15, 1877; application filed March 7, 1877.

To all whom it may concern:

Be it known that we, THOMAS GAMBLE and JEREMIAH WAGNER, of Martinsville, in the county of Clark, and in the State of Illinois, have invented certain new and useful Improvements in Water-Elevators; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction of buckets for chain-pumps, and their arrangement with a frame, a trough, and automatic emptying device, as will be hereinafter more particularly described.

To enable those skilled in the art to make and use our invention, we will now proceed to describe its construction and operation.

In the accompanying drawings, making part of this specification, Figure 1 represents a side elevation, in section, and Fig. 2 a perspective, of one of the buckets.

In the figures, A represents one of two frame-pieces which are placed in the well, and which extend from its bottom to a point above its top. These frame-pieces are parallel to each other.

B′ B′ represent shafts, which lie crosswise of the frame, near its top and bottom, having their bearings in same.

Upon these shafts are placed and secured the grooved wheels B B, which carry the chains.

F F represent the chains, which pass around the wheels B B, and which carry the water-buckets G G.

The water-buckets are constructed as represented, being wider at top than at bottom.

A rod, *a*, passes through the bucket from end to end, just above its center, so that said bucket will not turn upside down of its own accord when passing up or down in the well.

The ends of these rods project beyond the ends of the bucket, and have bearings in the links or loops made for them in the chains. On the ends of the rods are buttons, to prevent them from drawing out of their bearings. These rods are secured fast to the buckets, and serve as braces to strengthen them.

C represents a support on the frame, near its top, for sustaining the trough D, which is secured to it. An upright rod, E, is secured to the trough, as seen, in such position that when the bucket, in its ascent, reaches the curve on said upright it is partially rotated, so that the water is emptied from it into the trough.

This arrangement makes a simple and durable water drawing and emptying device.

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

The combination of the frame-work A, having an upper and lower shaft, B′, each provided with grooved pulleys B, the two endless chains F, and tapering buckets G G, pivoted thereto by the headed rods at points above their horizontal centers, all substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 23d day of February, 1877.

THOMAS GAMBLE. [L. S.]
JEREMIAH WAGNER. [L. S.]

Witnesses:
ELI LEHMAN,
JAMES COSGROVE.