W. WALTER.

Water-Elevator.

No. 164,887. Patented June 22, 1875.

Fig 1

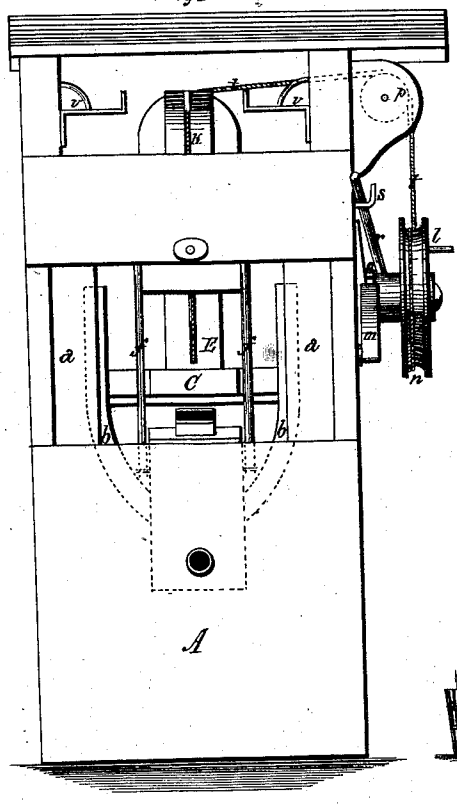
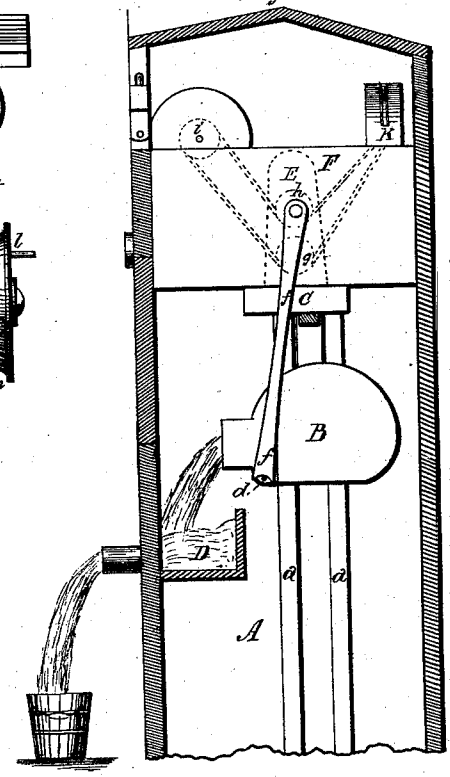


Fig 2.



WITNESSES.

Wm. Garner

C. W. Lemon

INVENTOR.

Wm. Walter

per F. A. Lehmann

Atty

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

WILLIAM WALTER, OF LATROBE, PENNSYLVANIA.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. **164,887**, dated June 22, 1875; application filed May 11, 1875.

To all whom it may concern:

Be it known that I, WILLIAM WALTER, of Latrobe, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Water-Elevators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in water-elevators; and it consists in the combination and arrangement of parts, hereafter fully described.

The accompanying drawing represents my invention.

A represents a rectangular frame, to be placed over a well, spring, or reservoir, from which water is to be elevated. Within the frame A, in the middle, at opposite sides, are secured the grooved guides *a*, that extend downward to the water's edge. The slides *b*, which are held in place by the guides *a*, and move up or down between them, support at their lower ends the bucket B, which bucket is pivoted, and may be tilted forward, but cannot be turned backward, its upper part or mouth, when in a vertical position, being in contact with the under side of the elevator C, immediately above it, and the said elevator being secured to the slides *b*. The shape of the bucket B is such that when lowered to the water it will tilt forward and catch the water, but, as soon as drawn upward, it resumes its vertical position, the open mouth pressing under the elevator C. From the sides, near the front of the upper part of the bucket, project pins *d*; and from a support, F, in the upper part of the frame A, depend two rods, *f*, under which the pins *d* catch when the bucket is drawn up, whereby the bucket is tilted forward and made to discharge its contents into the trough D. Fastened to the upper side of the elevator C, and in a vertical position, is the block E, in which are two pulleys, *g* and *h*, the one above the other; and in a support, F, extending from rear to front, in the upper part of the frame A, are also two pulleys, *i* and *k*, of which *i* is parallel with the support F, and *k* transverse. At the outside of the frame A is a crank, *l*, and upon its shaft a drum, *n*, and a ratchet, *o*, in which the pawl *m* catches. A cord, *t*, is passed from the drum *n* over the pulleys *p*, *k*, *g*, *i*, and *h*, and its end secured to the support F. By this arrangement four cords are made to support the bucket, all of which are controlled by the crank *l*. This number of cords may, by a similar arrangement, be increased, if desired, or decreased. A brake, *r*, is brought to bear upon the crank-shaft, between the drum and the ratchet, to control the motion of the bucket in its descent, which brake may be suspended, when not in use, upon the hook S. Near the upper corners of the opening, in front of frame A, are the braces *v*, intended to be used as supports for wires in case it be more convenient to place the frame at a distance from the well or spring, and to employ a car.

Having thus described my invention, I claim—

The combination of the bucket B, slides *b*, rods *f*, pins *d*, and guides *a*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of May, 1875.

WILLIAM WALTER.

Witnesses:
H. TELLHUINER,
SAMUEL B. FRY.