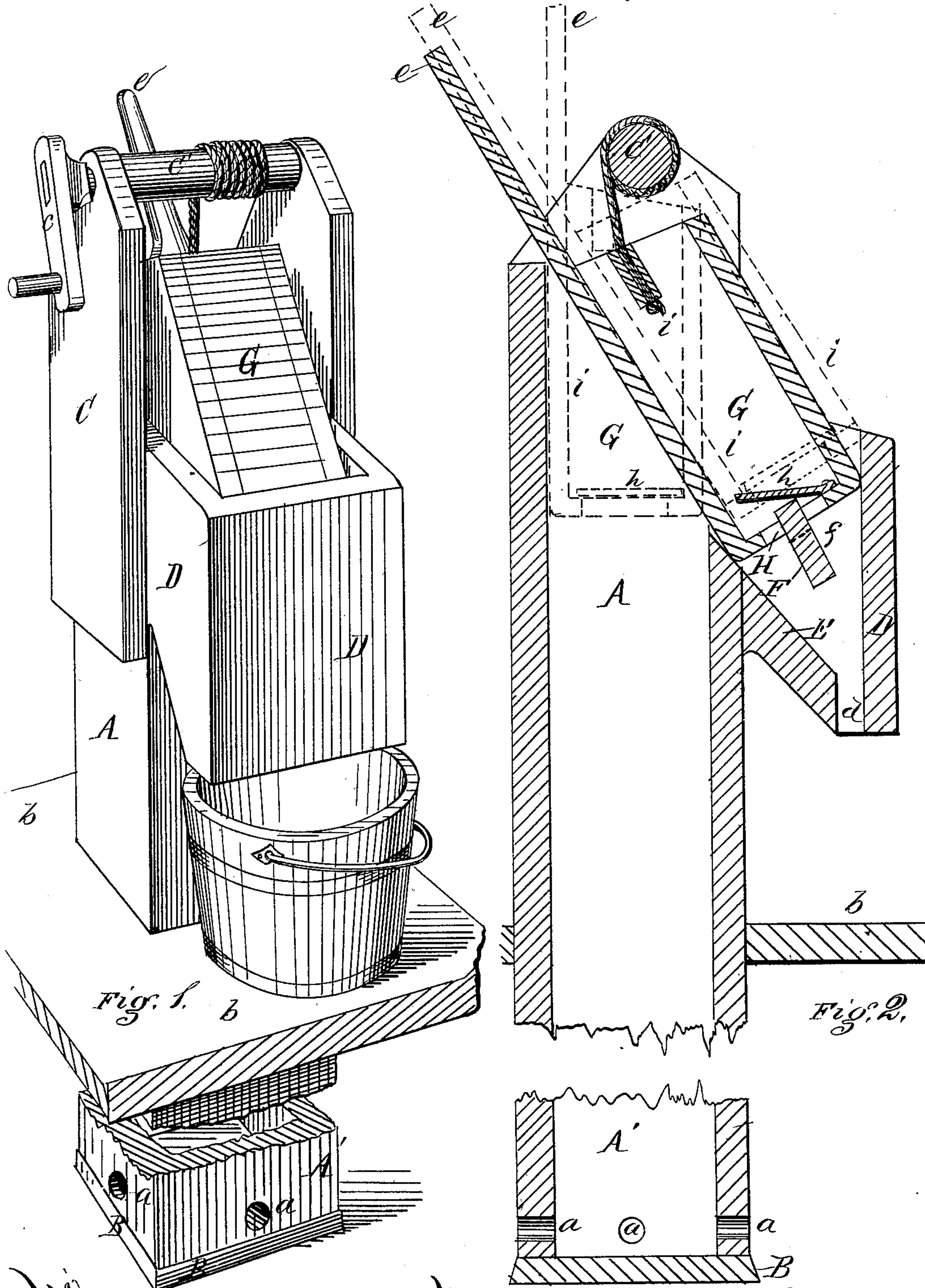


S. S. WELDAY.  
Water Elevator.

No. 220,045.

Patented Sept. 30, 1879.



Witnesses  
Francis L. Clark  
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# UNITED STATES PATENT OFFICE.

SAMUEL S. WELDAY, OF WAYNE TOWNSHIP, JEFFERSON COUNTY, OHIO.

## IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. **220,045**, dated September 30, 1879; application filed February 1, 1879.

*To all whom it may concern:*

Be it known that I, SAMUEL S. WELDAY, of Wayne township, in the county of Jefferson and State of Ohio, have invented an Improved Water-Elevator, which improvement is fully set forth in the following specification and accompanying drawings.

The object of my invention is a water-elevator which can be easily and cheaply constructed, and when not in use the bucket of the elevator will close the mouth or opening of the same, whereby accidents are prevented.

In the following specification or description of the apparatus it will be described as applied to a cistern, to which it more especially relates, though it operates equally well in shallow wells.

The invention consists in a tube which extends from a windlass-box on the platform over or around the mouth of a cistern down to the bottom. Said tube is closed at the bottom, and its sides are perforated by a series of holes a few inches up from its lower end. Internally this tube is of such size that it will allow a bucket of ordinary capacity to freely move up and down therein. Above this tube and covering it is a windlass-box of relative size thereto, the windlass being placed at the top at a central line from front to back, and provided with a crank. A spout projects from the front of this box, the bottom of which is inclined, so as to conduct the water away from the box, the mouth being of such height above the platform of the well or cistern as will permit a vessel to receive the water when discharged therefrom. Just below the top, and inside of this spout, is a cross-bar, which extends from side to side. A projection extends upward from the center of this bar, of such size as will easily enter the valve-opening in the bottom of the elevating-bucket and force the valve open. The bucket which is used to draw the water is connected to the windlass by a cord, in the usual way, and is of such size and shape as will correspond to the internal size and shape of the tube and of the capacity of an ordinary well-bucket. An opening is made in the bottom large enough to freely permit the water to enter or be discharged. This opening is provided with a hinged or flap valve, which closes it. From

the back of this bucket projects directly upward a long handle, which serves as a lever for tilting the bucket forward.

The invention is illustrated in detail in the accompanying drawings, to which reference being had it will be seen that Figure 1 is a perspective view of the invention; Fig. 2, a vertical transverse section, the lower part of the tube being shown detached in both views.

All similar letters of reference indicate like parts.

A is the tube, made preferably square, like a long box or spout. A' is the lower part, closed by the bottom B. Five or six inches above this bottom the sides are perforated by the holes *a a a*, which should be of such size and number as will admit a full supply of water into the tube. C is the windlass box or frame. It is set over and connected to that part of the tube A which projects above the platform *b b* on top of the cistern. C' is the windlass, *c* being the crank by which it is turned. D is the spout, extending outwardly from the front such a distance as will deliver the water from its mouth *d*, by the inclined bottom E, into a vessel set under it, as shown in Fig. 1. The cross-bar is situated in the medial line of the spout, and surmounted by the stationary trigger or valve-opener *f*. G is the elevator-bucket, which slides up and down in the tube A. It is open at the top. *e* is the long handle or lever which projects upward from the center of its back, the use of which will be hereinafter explained. H is the valve-opening in the bottom of the bucket. *h* is the valve, which opens upwardly and inwardly.

Operation: The bucket being at the lower part of the tube, and filled with water, it is raised up by the cord *i* on the windlass, in the usual manner, and when in the position shown by the dotted lines the windlass is held stationary and the lower part of the bucket G is thrown or tilted forward, as shown by dotted lines. By bearing down on the lever-handle *e* the bucket swings on the cord *i* until the lower end is over the spout D, when the windlass is released, and said bucket moves down and forward until stopped by the cross-bar F. At the same time the trigger *f* enters the valve-opening H and forces the valve *h* open, so that the

water is discharged into the spout D and delivered from its mouth into the receiving-bucket. It will be seen that the elevating-bucket when in this position completely closes the mouth of the apparatus and prevents anything accidentally getting into the cistern.

Having thus described my invention and its operation, what I claim, and desire Letters Patent for, is—

1. In a water-elevator, the windlass-box C, having the spout D, provided with a cross-bar, F, and inclined bottom E, in combination with the guide-tube A, arranged and operating as and for the object described.

2. The bucket G, constructed to be raised or lowered in the tube A, and provided with the valve *h* and the lever-arm *e*, for the purpose of tilting or throwing the bucket forward over the cross-bar F and spout D, all arranged and operating as and for the object set forth.

3. In a water-elevating apparatus, the tube A, or its equivalent, windlass-box C, having the spout D, trigger *f*, and bucket G, all combined and operating as and for the object set forth.

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Witnesses:

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