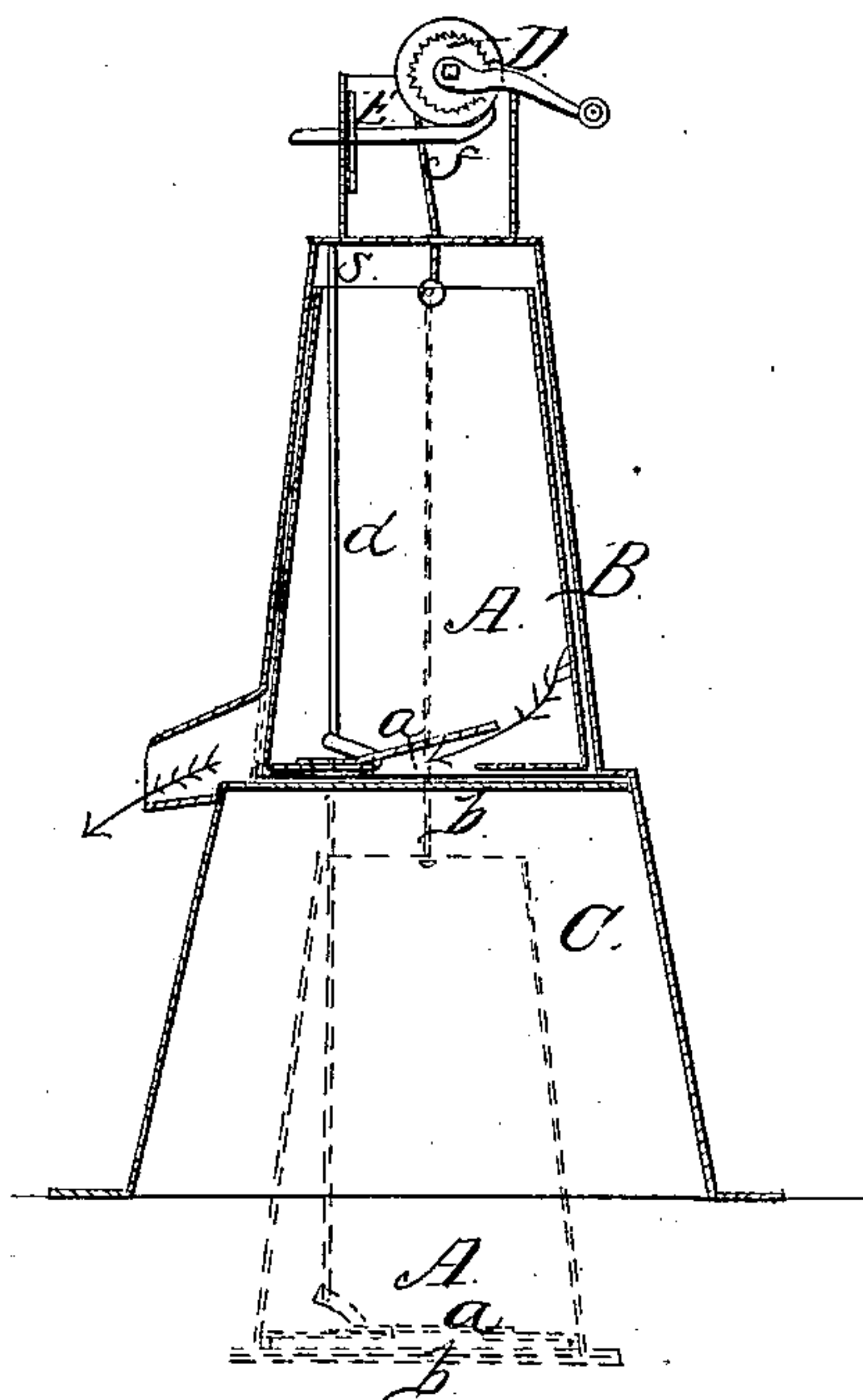


S. R. Boardman,
Windlass Water Elevator.
N^o 81,245. Patented Aug. 18, 1868.



Witnesses
A. F. Millson
A. Zoller

Inventor
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United States Patent Office.

SILAS R. BOARDMAN, OF FORT WAYNE, INDIANA.

Letters Patent No. 81,245, dated August 18, 1868.

IMPROVEMENT IN WATER-ELEVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SILAS R. BOARDMAN, of Fort Wayne, in the county of Allen, and State of Indiana, have invented certain new and useful Improvements in Water-Drawers; and I 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.

The nature of my invention consists in an improved method of constructing water-drawers. My invention consists in the construction and operation of the bucket.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

A represents a metallic bucket, which is constructed in the form represented in the drawings, and is provided with a tilting or trap-valve, *a*, secured to its bottom, as will be readily understood. Directly below the bottom of the bucket, and secured to it, is a horizontal disk, *b*, which is placed about one and one-half inch below said bottom, and is secured to it by any suitable means. Upon the upper surface of this disk *b* the water is discharged from the bucket A, when the valve is open.

B represents a cylinder, of a somewhat conical form, which is mounted upon a cylindrical base, C. The diameter of this base should be of a diameter equal to that of the disk *b*, which should fit snugly into it, when the bucket is delivered to the point of discharge. A shoulder, *c*, may be formed at the point of intersection of covers B and C, against which the edge of the disk may press, and which will thus form a packed joint, if desired. Just below this flange a spout is inserted, which carries off the water, as will be readily understood. Now it is clear that if the bucket is drawn up to the point of discharge, and the valve is operated, the water will be discharged on the upper surface of the disk, and thence it gravitates to the edges, and is there intercepted, and is thus caused to be discharged through the spout in the direction of the arrows.

This double-bottomed bucket may be used in various forms, and thus answer the same purpose, as it will be readily seen that a disk might be hinged to one side of the cylinder, and so attached to the well-rope that, in elevating the water, the disk would follow the bucket up, so as to receive the discharged water in the same manner as it is received in this case.

D represents a ratchet, which is secured to the windlass, as seen, in the ordinary manner. E is a pawl, which is so formed as to present a hook or catch, which takes into the ratchet, and holds the windlass in position, as seen. The other or outer end of said pawl is extended beyond the fulcrum or pivot *f*, and is so weighted that it overbalances the other end, and thus holds it in contact with the ratchet. When the operator desires to relieve the ratchet, for the purpose of lowering the bucket, all that is necessary to do is to lay the hand lightly on the weighted end of the pawl, and slightly elevate it from the ratchet, and thus the spool of the windlass may discharge the cordage, and thereby lower the bucket. When the bucket is lowered to the water, and has filled, the weighted end of the ratchet is dropped, and thus the hook is engaged with the ratchet, and hence all further fear of accident is overcome by a sense of security engendered by the use of this at once simple and effective device.

What I claim as new, and desire to secure by Letters Patent, is—

The bucket A, the bottom valve *a*, the tilting-rod *d*, the stop *s*, the disk *b*, in combination with the cylinder C, the same being constructed in the manner and for the purpose substantially as set forth and described.

S. R. BOARDMAN. [L. s.]

Witnesses:

H. F. WILLSON,
S. ZOLLARS.