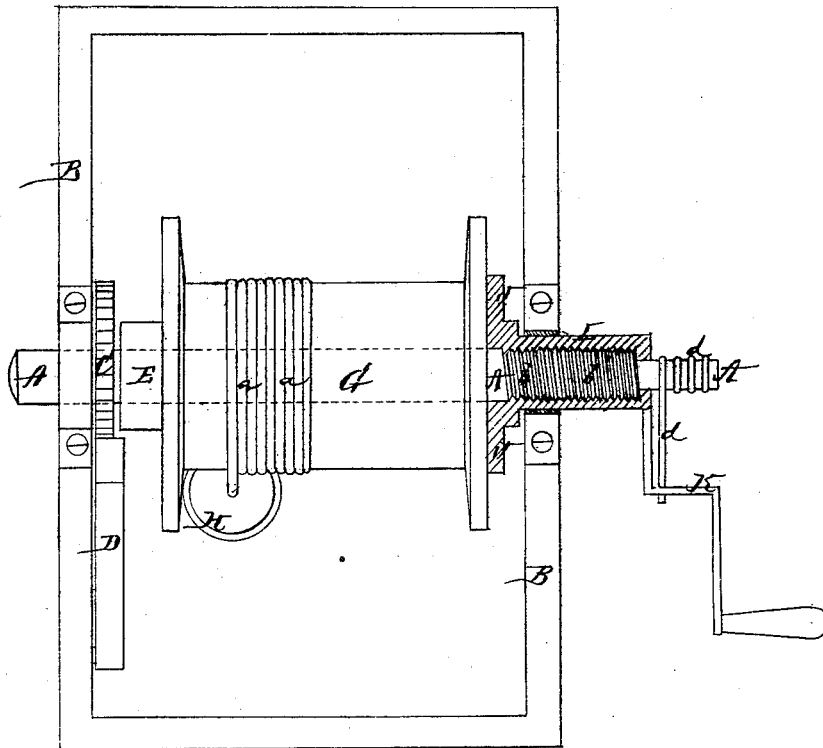


I. Dekle,

Water Elevator.

No. 108,242.

Patented Oct. 11. 1870.



Witnesses
A. A. Ygatman
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ISAIAH DEKLE, OF THOMASVILLE, GEORGIA.

Letters Patent No. 108,242, dated October 11, 1870.

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, ISAIAH DEKLE, of Thomasville, in the county of Thomas and in the State of Georgia, have invented certain new and useful Improvements in Windlass for Drawing Water; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in a windlass for drawing water, constructed so as to be operated by means of screw-friction, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a plan view of my machine.

A represents a shaft, placed across the well-house B, in suitable bearings.

At one end, inside of the well-house, the shaft A is provided with a toothed wheel, C, in which gears or catches a pawl, D, pivoted on the inside of the well-house.

On the inner side of the ratchet-wheel C, upon the shaft A, is formed a collar, E, and against this collar, from the other end of the shaft, is placed the spool G, which turns freely on the shaft.

To this spool G is attached the well-rope *a*, with its bucket H.

Beyond the spool G, at the opposite end from the collar E, the shaft A is provided with screw-threads *b b*, and a hollow screw-sleeve, I, is screwed onto the same, said sleeve resting in the bearings on that side of the well-house, the shaft itself actually having its bearing at that end within the sleeve.

At the inner end of the sleeve I is formed a circular flange, J, which, when the sleeve is screwed up, bears

against the end of the spool G, while at the outer end of the spool is formed a crank, K.

The flange J is held screwed up against the spool G by means of a spiral spring, *d*, surrounding the end of the shaft A beyond the sleeve I, one end of said spring being secured to the shaft, and the other end bearing against the crank K, as shown.

When the crank K is turned toward the right, the friction of the flange J against the spool G causes said spool to turn, winding up the well-rope *a*, and raising the buckets.

As soon as the bucket has been emptied the force on the crank K is exerted toward the left, which releases the flange J from the spool G, so that the weight of the empty bucket will cause said spool to revolve on the shaft, unwinding the well-rope, and lowering the bucket. The wheel C and pawl D prevent the shaft A from turning backward during this operation.

The bucket having been raised, as above described, it is tilted by means of a bail or rod, secured inside the well-house, and having a projection in the center, against which the edge of the bucket strikes, causing the bucket to empty in a trough, or other suitable channel, made for that purpose.

Having thus fully described my invention,

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

The combination, with the spool G, of the shaft A, with flange E and with screw-threads *b b*, hollow sleeve I, with flange J and crank K, and the ratchet C at one end and spring *d* at the other end of shaft A, all constructed to operate substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 1st day of July, 1870.

Witnesses:

ISAIAH DEKLE.

RUFUS A. VARNEDOE,

HENRY H. SANFORD.