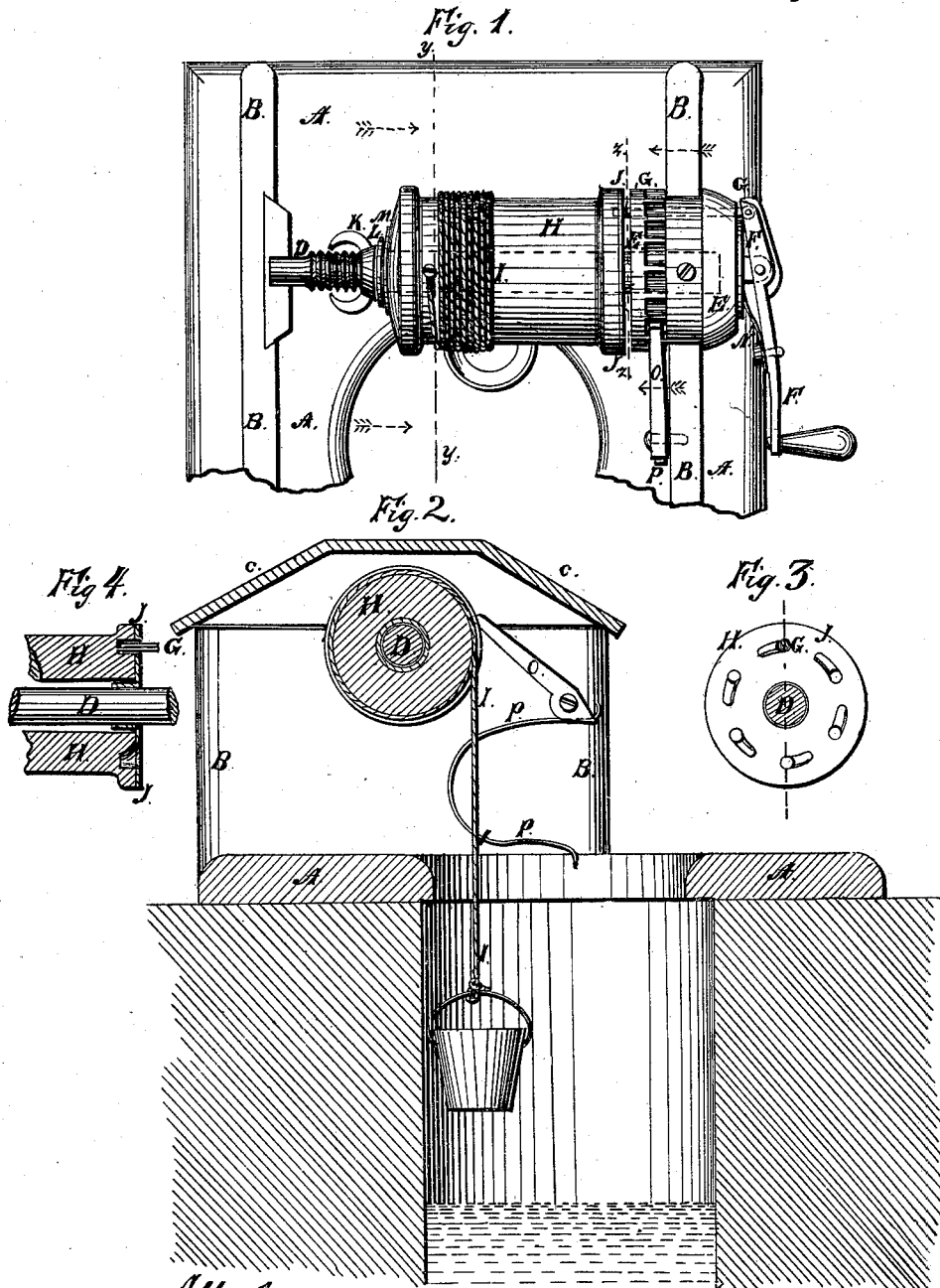


S. C. Lewis,

Windlass Water Elevator,

N<sup>o</sup> 66,600.

Patented July 9, 1867.



Attest:  
Thos. Tinsch.  
Jas. Service.

Inventor:  
S. C. Lewis.  
Per Manly C. Little

# United States Patent Office.

SAMUEL C. LEWIS, OF WOODBRIDGE, MICHIGAN.

Letters Patent No. 66,600, dated July 9, 1867.

## 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, SAMUEL C. LEWIS, of Woodbridge, Hillsdale county, Michigan, have invented a new and useful Improvement in Water Elevator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of a well-curb, to which my improved apparatus has been applied, the cover being removed and part being broken away to show the construction.

Figure 2 is a sectional view of the same, taken through the line *y y*, fig. 1.

Figure 3 is a detail sectional view of the same, taken through the line *z z*, fig. 1.

Figure 4 is a detail sectional view of the same, taken through the line *x x*, fig. 3.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved apparatus for drawing water from wells, cisterns, &c.; and it consists in the combination of the crank-spring, sliding-rod, shaft-cap, and spool with each other, as hereinafter more fully described.

A represents the platform, B the sides, and C the cover of the curb, about the construction of which parts there is nothing new. D is the shaft, one end of which revolves in bearings in one side of the curb B. The other end of the shaft D has a cap, E, securely attached to it, which revolves in bearings in the other side of the curb, as shown in fig. 1. To the projecting end of the shaft D is pivoted the crank or lever F, as shown in fig. 1, to one end of which is attached the handle, and to the other end is pivoted the sliding-rod G. The sliding-rod G passes through the cap E longitudinally, as shown in dotted lines in fig. 1. H is a spool, which works loosely upon the middle part of the shaft D, and to which is attached the end of the rope I, which sustains the bucket. To the end of the spool H is attached a plate, J, having numerous holes formed through it for the reception of the sliding-rod G, the said plate being grooved upon one side of said holes to guide the end of the rod G into place. The spool H is held and adjusted in place by a thumb-nut, K, working upon screw-threads cut upon the shaft D, as shown in fig. 1. L is a rubber or other elastic washer, and M is a metallic washer, placed upon the shaft D, between the thumb-nut K and the end of the spool H, to diminish friction and prevent wear while the bucket is descending into the well. N is a spring, one end of which is attached to the crank-lever F, and the free end of which rests against the end of the cap E, to hold the sliding-rod G forward to its place, except when drawn back to allow the bucket to run down into the well. O is a pawl, pivoted to the side of the curb B in such a position that it may take hold of the ratchet-teeth formed upon the inner end of the cap E, to prevent the bucket from running back, should the crank be accidentally released. P is a spring, one end of which is attached to the side of the curb B, and the other end of which rests against the end of the pawl O, to hold it to its place.

In using the apparatus, the bucket is lowered by pushing the handle of the crank F inward, so as to withdraw the sliding-rod G from the spool H, which allows the bucket to run down into the well. As soon as the pressure is removed from the crank F, the action of the spring N forces the sliding-rod G inwards, so as to enter one or the other of the holes in the end of the spool H; then, by operating the crank, the full bucket will be raised. If desired, the rapidity of the bucket's descent may be regulated by a brake, one end of which should be pivoted to the side of the curb, and the curved shoe of which should ride in a groove formed in the spool H, near its end.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the crank F, spring N, sliding-rod G, shaft D, cap E, and spool H, with each other, substantially as herein shown and described, for the purpose set forth.

The above specification of my invention signed by me this 18th day of March, 1867.

SAMUEL C. LEWIS.

Witnesses:

FRANCIS D. YOUNG,  
BETSEY YOUNG.