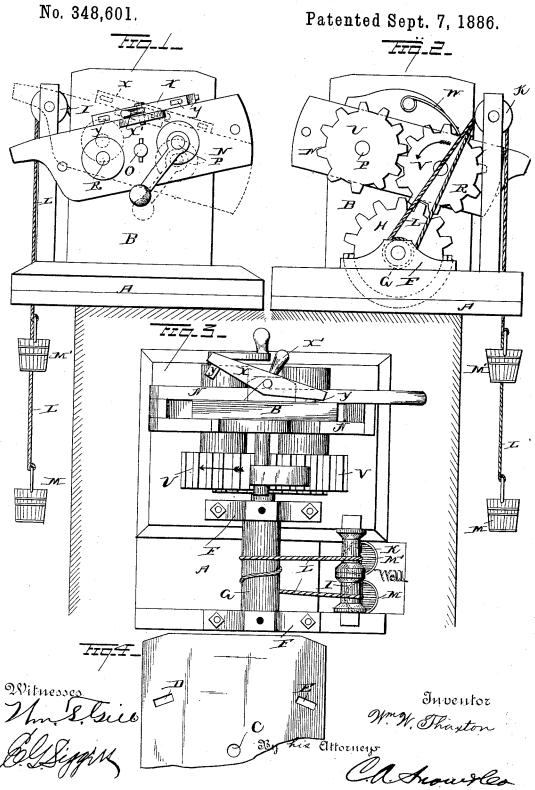
W. W. THAXTON.

WATER ELEVATOR.



UNITED STATES PATENT OFFICE.

WILLIAM W. THAXTON, OF JACKSON, GEORGIA.

WATER-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 348,601, dated September 7, 1886.

Application filed June 30, 1886. Serial No. 206,730. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. THAX-TON, a citizen of the United States, residing at Jackson, in the county of Butts and State 5 of Georgia, have invented a new and useful Improvement in Water - Elevators, of which the following is a specification.

My invention relates to an improvement in windlass water - elevators; and it consists in 10 the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation 15 of a water-elevator embodying my improvements. Fig. 2 is a similar view of the same, taken from the opposite side. Fig. 3 is a top plan view. Fig. 4 is a detached view of standard B.

The object of my invention is to provide an apparatus for raising one bucket from a well simultaneously with lowering another bucket therein, thereby enabling the weight of one bucket to partly counterbalance the other.

A further object of my invention is to provide means to prevent the crank-handle from being rotated in the reverse direction in the event that the person operating the apparatus should release his hold from the crank-handle, 30 and thereby prevent the latter from injuring

A still further object of my invention is to provide a cheap, simple, and thoroughly practical apparatus for raising water from the well.

These objects I attain by the construction

hereinafter described.

A represents the platform which covers the

upper side of the well.

B represents the vertical standard, which 40 projects from one end of the platform, and is provided with an opening, C, and also with openings D and E, which are in the same radius.

F represents a pair of bearing-blocks, which 45 are secured on the platform, and in the said bearing-blocks is journaled a windlass, G, to one end of which is attached the spur-wheel H.

I and K represent a pair of sheaves or pulleys, which are supported in a suitable frame 50 or other device above the windlass and on one side of the latter.

L represents a rope or chain, which is coiled around the windlass and has one end passed over the pulley I and the other end passed over the pulley K. The depending ends of 55 the said rope or chain are attached to well-

buckets M M'.

N represents a rocking frame, which is fulcrumed to the standard B by means of a bolt, O, which passes through a central opening 60 made in the rocking frame, and also through the opening C of the standard. Shafts P and R are journaled in the rocking frame on opposite sides of the bolt O, and the said shafts extend through segmental slots S, which are 65 made in the standard B. To the outer end of the shaft P is attached a crank-handle, T, and to the inner end of the said shaft is attached a spur-pinion, U. To the inner end of the shaft R is attached a spur-pinion, V, which 70 meshes with the pinion U. The rocking frame is also provided with a pawl, W, on its inner side, which engages the pinion V, and thus prevents the latter from rotating in the direction indicated by the arrow in Fig. 2. 75 On the outer side of the frame N, on the upper edge thereof, is pivoted a double-ended detent, X, having an outwardly extending handle, X', and projections or pins Y at its extremities, which pins or projections are adapt- 80 ed to enter the openings D and E of the standard, so as to support and lock the rocking frame either in the position shown in solid lines in Fig. 1 or in dotted lines in the said figure. When the detent engages the opening 85 B, the pinion V is caused to mesh with the spur-wheel H, and when the detent engages with the opening E and the rocking frame is locked in the opposite inclination the pinion V is disengaged from the wheel H and the 90 pinion U is caused to mesh with said wheel. The pinions U and V are always engaged with each other.

In order to raise the bucket M the rocking frame is locked in position to cause the pin- 95 ion U to engage with the wheel H, and the crank is turned in the direction indicated by the arrow in Fig. 3, thus causing the windlass to wind upon the end of the rope which passes over the pulley I, and to release the 100 end of the rope which passes over the pulley K, and thus lower the bucket M' in the

well at the same time that the bucket M is being elevated therein. When the bucket M reaches the upper end of the well, the detent is disengaged from the opening E, and the 5 rocking frame is tilted so as to cause the pinion V to engage with the wheel H, and the detent is caused to engage the opening G and lock the rocking frame in position. The crank is then turned in the same direction as before, to which reverses the rotation of the windlass and causes the latter to lower the bucket M and raise the bucket M' simultaneously.

Having thus described my invention, I

1. The combination of the platform having the standard B, provided with the openings D and E, the rocking frame fulcrumed to the said standard and having the geared pinions U and V, and the detent adapted to engage 20 either of the openings D and E, the pawl engaging one of the pinions to prevent retrograde movement thereof, and the windlass

having the wheel H, with which one of the

pinions is adapted to engage when the rocking frame is tilted in either direction, sub- 25

stantially as described.

2. The combination, in a windlass waterelevator, of the standard B, having the openings D and E, the rocking frame fulcrumed to the said standard, and having the geared pin- 30 ions U and V and the pivoted pawl W, to engage either of the said pinions, the detent X, pivoted to the rocking frame and having the projections Y, adapted to engage the openings D and E, and the windlass having the wheel 35 H, adapted to engage one of the geared pinions when the rocking frame is tilted in either direction, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 40

presence of two witnesses.

WILLIAM W. THAXTON.

Witnesses:

L. D. WATSON.

D. J. THAXTON.