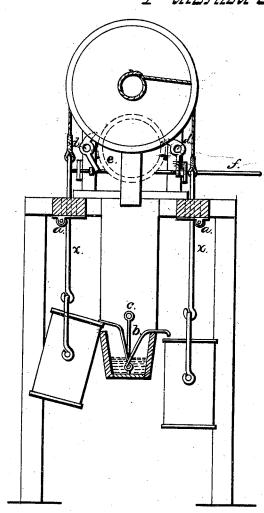
II Vealler,

Windlass Water Elevator.

Nº 5,874.

Faterited Oct 24,1848.



UNITED STATES PATENT OFFICE.

J. J. VEDDER, OF SCHENECTADY, NEW YORK.

APPARATUS FOR RAISING WATER.

Specification of Letters Patent No. 5,874, dated October 24, 1848.

To all whom it may concern:

Be it known that I, John J. Vedder, of Schenectady, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Apparatus for Raising Water, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing, which forms a part of the same and represents a vertical section through the improved parts of the machine.

The nature of my improvements consists in applying friction rollers to turn the buckets to a proper position, and in a guard suspended over the spout, to prevent the water from being thrown over as the buckets are tilted; and lastly the connected pawls, or dogs, to prevent accidents while drawing water.

The apparatus is in general like that pat25 ented by myself and another by which double cords are dispensed with; but instead
of the guide (x) of the buckets passing up
through a hole in the frame, it bears against
a roller (a) placed just outside of it; this
30 prevents any catching to which the other
was liable, and also protects the rope from
chafing. In the center of the spout is placed
a plate (b) of sheet metal or other suitable

substance, which is suspended on pivots (c)above, so that it will swing from side to 35 side; this plate serves as a guard to prevent the water from being thrown over the opposite side of the trough when the bucket is tilted, and thus protects the rope on the opposite side from becoming wet and rotted by 40 the action of the air and water, which would otherwise be the case;—by this arrangement the ropes are always kept dry, as they never come near the water. The dogs (d, d) take into opposite sides of the spur wheel (e), 45 shown by dotted lines by which the buckets are raised, and they are so connected, that when one is contact with said wheel (e) the other will be removed, and vice versa, by means of a rod (f) by which they are 50 thrown in and out of gear; this prevents the possibility of turning the crank the wrong way; and when small or weak persons are drawing water there is no danger of a bucket falling if they become exhausted.

Having thus fully described my improvements, what I claim therein as new, and which I desire to secure by Letters Patent

The guard plate (b) arranged substan- 60 tially as herein set forth, and for the purpose described.

JOHN J. VEDDER.

Witnesses:
James Fuller,
A. B. Austin.