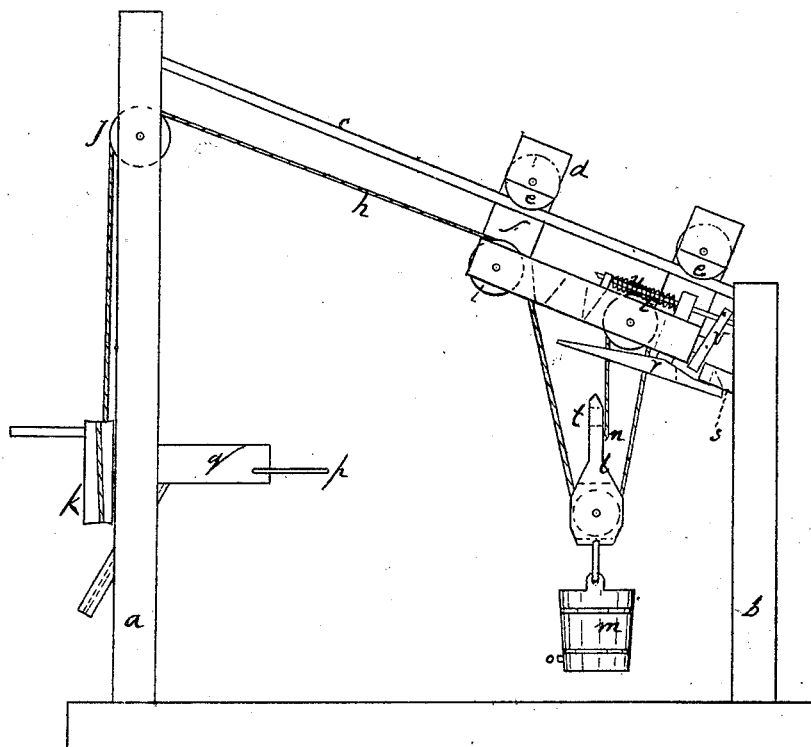


P. W. SAWYER.
 Improvement in Water-Elevators.
 No. 114,049. Patented April 25, 1871.



Witness:
George E. Bird
John W. Stockwell

Inventor
Parker W. Sawyer
 Per Wm. H. Clifford atty.

United States Patent Office.

PARKER W. SAWYER, OF GRAY, MAINE.

Letters Patent No. 114,049, dated April 25, 1871.

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, PARKER W. SAWYER, of Gray, in the county of Cumberland and State of Maine, have invented a new and useful Water-Drawer; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which is seen a side elevation of my invention illustrating its operation.

The part *a* in the drawing is intended to illustrate the point to which the water is carried and poured out; and *b* the point from which it is taken. Between these two extends the line *c*, upon which runs the carriage *d*. The line *c* serves for the track of the carriage. Only one line is used. On it run the trucks *e*, set in the frame *f*.

The frame is hauled up from the well or other place from whence the water is taken by means of the rope *h* passing over the pulleys *i* *i'*, pulley *j*, and finally wound around the crank-wheel *k*.

The rope *h* passes also down through a pulley or tackle, *l*, attached to the pail *m*, and its end is finally secured to the tackle at *n*.

When drawn up to the point *a*, or when the water is to be emptied, the stud *o* on the pail strikes the wire *p* on the receptacle *q*, and the continued draft of the rope *h* tips the pail and pours its contents into *q*.

The operation of certain devices in the carriage *d* remains to be described.

r is a pivoted arm, with a hook on the lower end of the same. At the upper end it may be made bifurcated, so that the upper part of the tackle *l* will pass up into the same. This hook passes under the catch *s* and so keeps the carriage still while the pail filled with water is being drawn up out of the well or water,

but when *l* enters the hole or bifurcation in *r* then the upper end of *r* is lifted or pushed up, and so the hook released from the catch *s*, and when the rope begins to draw upon the carriage it is then permitted to be drawn up on the wire *c*.

The hole *t* (indicated by dotted lines) in the upper part of the block *l* is to receive the end of the rod *u*.

When the carriage starts from *a* the pail is up in the carriage—that is, the rod *u* is entered in the hole *t*. When the carriage arrives at *b* the pivoted piece *v* strikes the catch *s* and draws forward the rod *u*, (to which it is attached,) and draws its upper end out of the hole *t*. Then the pail is free to drop by its own weight and fill itself from the water into which it drops. It is then drawn up, and as the carriage moves away from *b* the rod *u* is pushed back by the spring and its upper end enters the hole *t*, and thus the pail is supported till it is carried to *a*.

The peculiarity of my carriage consists in its having one set of wheels only and one track. I do not claim specifically the winding or emptying apparatus, or the releasing and securing of the pail. If the carriage can pass sufficiently near the surface of the water the bucket may be filled without detaching.

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

The combination of the carriage *d*, having single wheels *e*, pulleys *l*, hook-lever *r*, rod *u*, pivoted piece *v*, tackle-block *l*, and line *h*, with the catch *s*, track *c*, pulley *j*, and wheel *k*, and receptacle *q* *p*, as herein set forth.

Portland, March 13, 1871.

Witnesses:

PARKER W. SAWYER.

WM. HENRY OLIFFORD,

GEORGE E. BIRD.