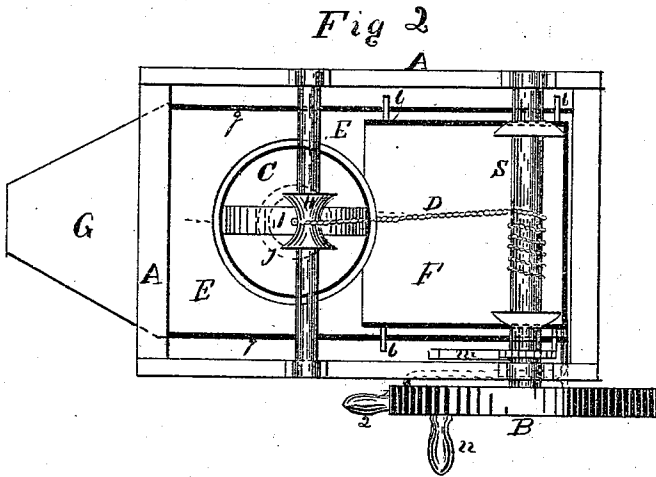
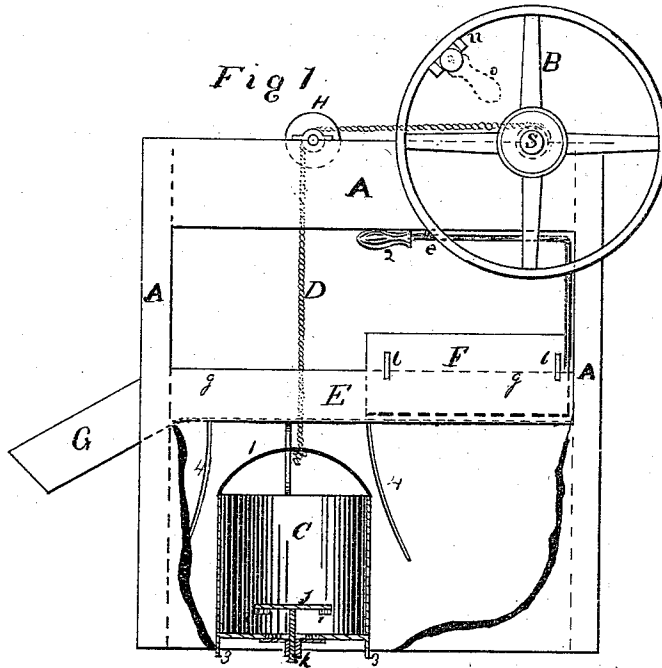


N. H. LINDLEY.
Water Elevator.

No. 126,064.

Patented April 23, 1872.



H. Skunk
E. W. Schuyler

WITNESSES

INVENTOR

N. H. Lindley

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NOAH H. LINDLEY, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. 126,064, dated April 23, 1872.

Specification of certain Improvements in Well-Curbs and Buckets, invented by NOAH H. LINDLEY, of Bridgeport, county of Fairfield, State of Connecticut.

My invention relates to the use, in an ordinary frame-curb, of a platform with orifice for passage of bucket, a sliding and receiving platform or truck, a valve-bucket, a suitable guide-pulley, windlass, brake, and jointed-levered hand-wheel for raising and lowering same. The object of invention—ease in lifting water, facility in discharging same into a receptacle without tipping bucket, thus enabling me to use a bucket in a well walled with tile a very little larger than bucket.

In the drawing, Figure 1 is a side view of curb embodying my invention. Fig 2 is a top view of same.

A, the curb of wood; B, hand-wheel of iron, the periphery flat for brake to bear against—on the side the hinged handle *n* is secured; C, bucket; *j*, valve to same; D, rope; E, platform; F, sliding or receiving truck; G, spout; H, guide-pulley; *i i i i*, lugs sliding on guides *g g*, and supporting truck; 1, bail to bucket; *k*, valve-guide; 7 7, packing; 3 3, legs to bucket; S, windlass; *m*, ratchet and pawl; 4 4, guiding-arms. The curb I construct of wood in the usual way. In this, at a proper distance from guide-pulley to allow of raising the bucket clear of the same, I set the platform E; this can be either of wood or metal, galvanized or tinned metal preferred; through this the orifice for passage of bucket is cut, allowing for clearance. On this platform the guides *g g* are secured with upper edges straight and smooth. This platform pitches to the front to give a rapid clearance to the water. Above this, and working on the guides *g g*, is set the truck F, the lugs *i i* being secured to its sides, which are high enough to prevent the water flowing over; the front edge is bent downward so that it will slide close to platform; this truck to be of metal and operated by the lever 2. To the front of platform is attached the spout G, similar in construction to those in ordinary use. On the top and near the back of curb the windlass S is secured by ordinary bearings; the flanges are set in such a manner that the rope will pass on as near a right line as possible. The shaft to windlass extends over the

side of curb to receive the wheel B, which is keyed to shaft, the flat face of wheel affording sufficient bearing for the lever 2. To the inside of rim I secure the hinged handle *n*, the same being kept in position desired by a spring. Immediately over the bucket-orifice a shaft is set for the guiding-pulley H, this pulley being made quite concave to keep the rope always in center of orifice. The bucket is constructed of metal—either sheet-iron, zinc, medallion-metal, or copper; its upper and lower edges are banded for strength. The bail 1 is secured to bucket by rivets, and has an opening for rope in center. Through the bottom of bucket an opening is cut and covered by valve J, working by stem through the guide *k*. The lower end of stem is enlarged to regulate the lift. If the bucket is made of sheet-iron it will be coated with porcelain. On the bottom of bucket are secured legs to regulate the opening of valve and allow of a free discharge of the water. To guide the bucket, when used in wells of large diameter, I set the guides 4 4 to the under side of platform E.

To operate my invention the bucket is drawn up from the truck F; the operator throws back the same, uncovering the orifice for passage of bucket; the lever 2 is pressed up against the periphery of hand-wheel B, and the descent of bucket regulated by that, the handle *n* being thrown down to the position indicated by dotted lines. As soon as the bucket reaches the water the valve *j* lifts, admitting the water, and immediately closes as soon as the direction is changed; the handle *n* is put in position and the bucket drawn up till the bail strikes the pulley, when the truck is drawn forward, covering the orifice, and bucket lowered back onto same. The valve-stem being longer, when the valve is closed, than the legs 3 3, it is lifted by the truck, opening the valve, and the water passes out and is carried to the receptacle through the spout G. This curb is more especially designed for wells walled with small tile or piping, the same running up to the platform E; but can be used in ordinary wells by the addition of the guiding-arms 4 4 4 4, they overcoming the swing of bucket. The use of a platform enables me to cover the well, keeping out anything that would be injurious to the water. If it is desired to retain the water

in the bucket the ratchet and pawl are used to hold the bucket up from truck.

What I claim as my invention is—

1. In a well-curb, the platform E with bucket-orifice, guides *g g*, truck F sliding on guides *g g*, operated by lever 2, for the purpose specified.

2. The metal bucket C arranged with valve J, guide *k*, legs 3 3, and bail 1, in combination with platform E and truck F, for the purpose specified.

3. The combination, with hand-wheel B, of the hinge-jointed handle *n* and brake *e*, in con-

nection with windlass, ratchet and pawl, rope D, guiding-pulley H, bucket and valve J, stem *k*, legs 3 3, truck F, platform E, and lever 2, when constructed and arranged as specified and shown.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

NOAH H. LINDLEY.

Witnesses:

A. SKAATS,

E. N. SEELYE.