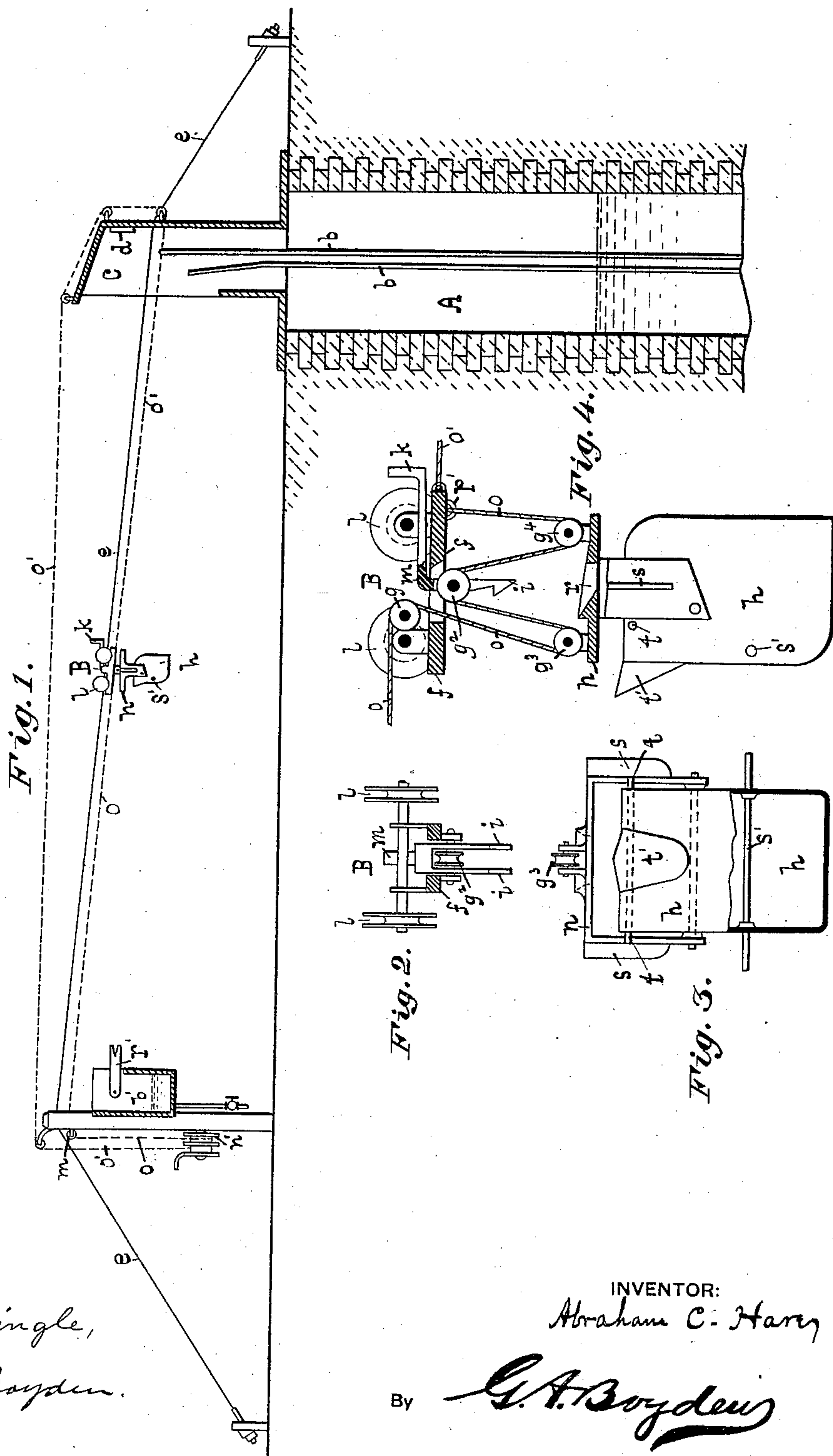


(No Model.)

A. C. HARE.  
WATER CONVEYING APPARATUS.

No. 320,933.

Patented June 30, 1885.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

ABRAHAM C. HARE, OF BECKLEYSVILLE, MARYLAND.

## WATER-CONVEYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 320,933, dated June 30, 1885.

Application filed November 15, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ABRAHAM C. HARE, a citizen of the United States, residing at Beckleysville, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Water-Conveying Apparatus, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to a device for raising and conveying water from wells, springs, &c., to any desired distance or height; and it consists of a traveling device which carries and automatically drops the bucket in the well and delivers the contents thereof in the receptacle at the desired place, and as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the device with the well and other parts in section; Fig. 2, an end view of the truck with frame in section; Fig. 3, front view of the guide-frame and bucket with part of the latter broken away; Fig. 4, side view of the bucket and truck, the latter being in section and the former some distance therefrom, in position as when descending or ascending, showing the position of the cord.

Similar letters refer to similar parts throughout the several views.

The letter A designates the well, provided with guides *b*, one of which is forked at the top, a suitable hood, *c*, to which is attached the projection *d*, and suitable pulleys for the return-cord, and through which the wires *e* pass. The wires *e*, of which there are two, run parallel to each other, and extend from the well to the delivering-point, and are supported by suitable means and at necessary places.

The truck B consists of a frame, *f*, four grooved wheels, *l*, which travel on the wires *e*, a pulley, *g*, a pivoted lever, *m*, provided with hooks *i i*, with a pulley, *g*<sup>2</sup>, at the pivoting-point, and an arm, *k*, which extends backward over the frame, and which comes in contact with the projection *d* in the hood *c*.

The frame *n* forms a yoke in which the bucket *h* is pivoted, and is provided with an opening, *r*, through which the hooks *i i* enter wings *s*, which run in the guides *b* in the well, and pulleys *g*<sup>3</sup> and *g*<sup>4</sup>, around which the cord *o* passes.

The bucket *h* consists of a square sheet-metal receptacle pivoted to the frame *n* at one side of its center, which keeps it in an upright position, as the lugs *t* prevent it from tilting backward, and is provided with a suitable lip, *t'*, and a tilting-rod, *s'*, which passes through the bucket and projects on each side, by which construction the rod is prevented from tearing or injuring the sides of same when it comes in contact with arms *r'* on box *b'*, the lugs *t* being constructed likewise. The box *b'* is situated at any desired place and in which the contents of the bucket *h* is delivered, and is provided with pivoted arms *r'* and suitable draw-off pipes.

The cord *o* may be of any suitable material, cotton preferably, one end of which is attached to the truck-frame *f* at *p'*, from which it passes around the pulleys *g*<sup>2</sup>, *g*<sup>3</sup>, *g*<sup>4</sup>, and *g*, from thence to the reel *n'*, via pulley *m'*. The return-cord *o'* runs from the end of the truck-frame, over the pulleys on the hood *c*, and returns to a second reel, which works in unison with reel *n'* and is wound in an opposite direction thereon from the cord *o*, by which as one is unwound the other is wound, or vice versa. The cord *o'* is not necessary when a sufficient incline of the wires *e* is attainable to return the truck to the well.

In operating my device, unwind the cord *o* from the reel, which permits the truck B to run down the incline wires *e* to the well. Arriving at that point the arm *k* comes in contact with the projection *d*, which throws the hooks *i* back and releases the bucket-frame, which then descends the well as the cord is unwound. The wings *s*, being in the grooves of the guides *b*, keep the same in its relative position. When the bucket is filled, the reel is turned in the opposite direction, which raises the bucket until it comes in contact with the truck B, the hook *i* entering the opening *r* in the frame *n* and hooks the same. The whole is then drawn to the delivering-box *b'*, which is provided with pivoted arms *r'*, and which comes in contact with the end of the rod *s'* of the bucket, which holds the same at that point, and as the truck is moved forward the bucket is thereby tilted and the contents delivered in the receiving-box, to be drawn off as desired.

Having fully described my invention, what



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

1. The combination of the truck B, the bucket *h*, the cord *o*, and the pulleys *g*, *g*<sup>2</sup>, *g*<sup>3</sup>, and *g*<sup>4</sup>, as herein shown and specified.
2. The combination of the well A, the guides *b*, bifurcated at the top, and the bucket-frame *n*, provided with guide-wings *s*, as herein described.
3. The combination of the truck B, the wires *e*, the bifurcated guides *b*, and the bucket-frame *n*, provided with wing-guides *s*.
4. The combination of the frame *f*, the hook *i*, and the pulley *g*<sup>2</sup>, mounted at the pivoted point of the hook, as herein shown.
5. The combination of the bucket *h* and the rod *s'*, running through the same and its end projecting therefrom, whereby the sides of the bucket are prevented from being damaged.
6. In a well device, the combination of the frame *n*, the bucket *h*, pivoted thereto on one

side of the center, and the lugs *t*, for the purpose as herein specified.

7. The combination of the wires *e*, the truck B, the box *b'*, the pivoted bucket *h*, and the pivoted arms *r'*, whereby as the rod *s'* describes an arc of a circle from the pivoting point of the bucket the arm may oscillate accordingly.

8. The combination of the reel *n'*, the cords *o* and *o'*, wound in opposite directions thereon, and the truck B, as herein specified.

9. The combination of the frame *n*, the bucket *h*, pivoted thereto, and the rod *t*, running through and projecting from either side of the bucket, as herein shown and set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ABRAHAM C. HARE.

Witnesses:

B. T. HOSHALL,  
S. G. HOSHALL.