

W. Painter,

Windlass Water Elevator,

No. 45,339.

Patented Dec. 6, 1864.

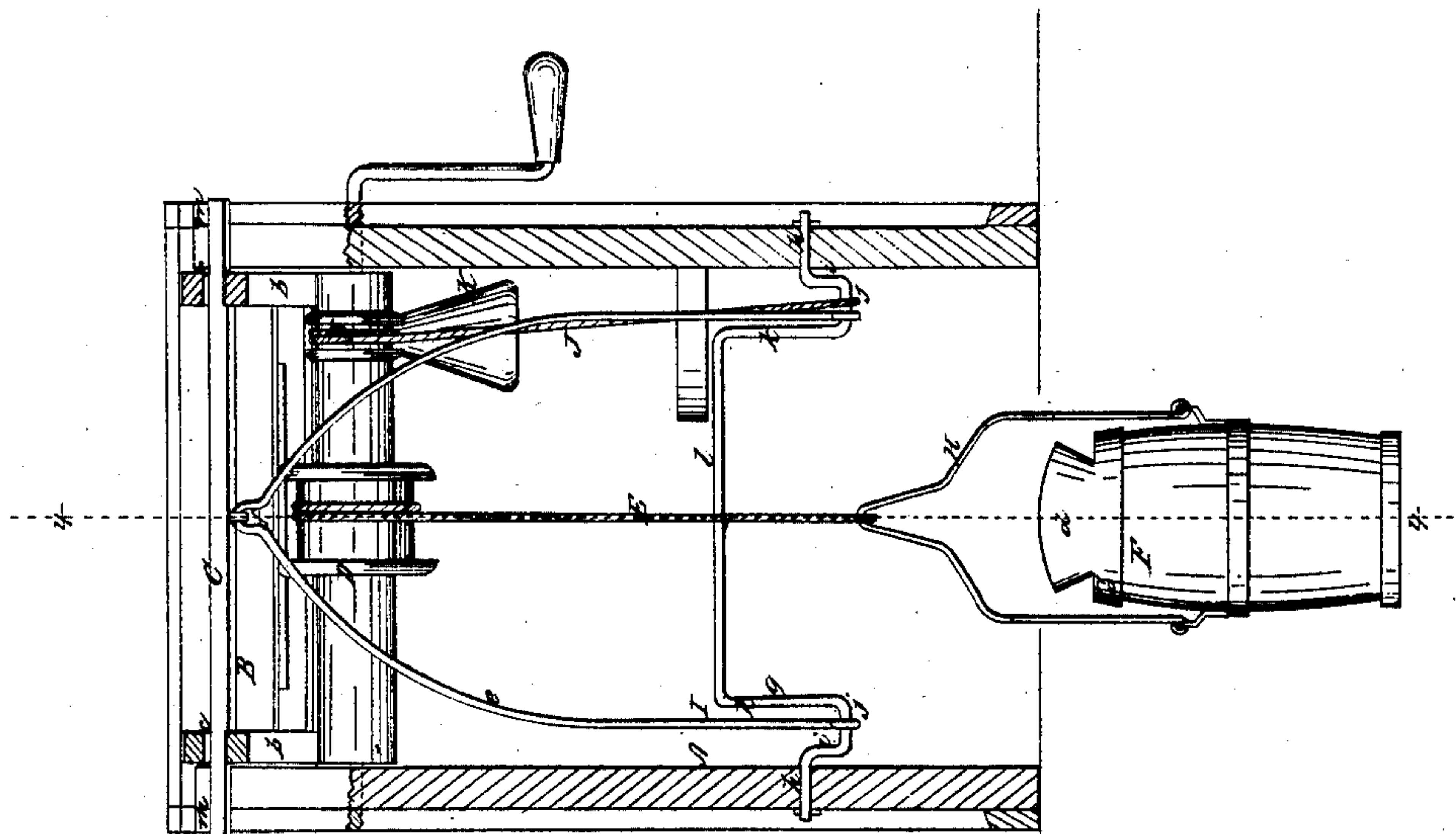


Fig. 2.

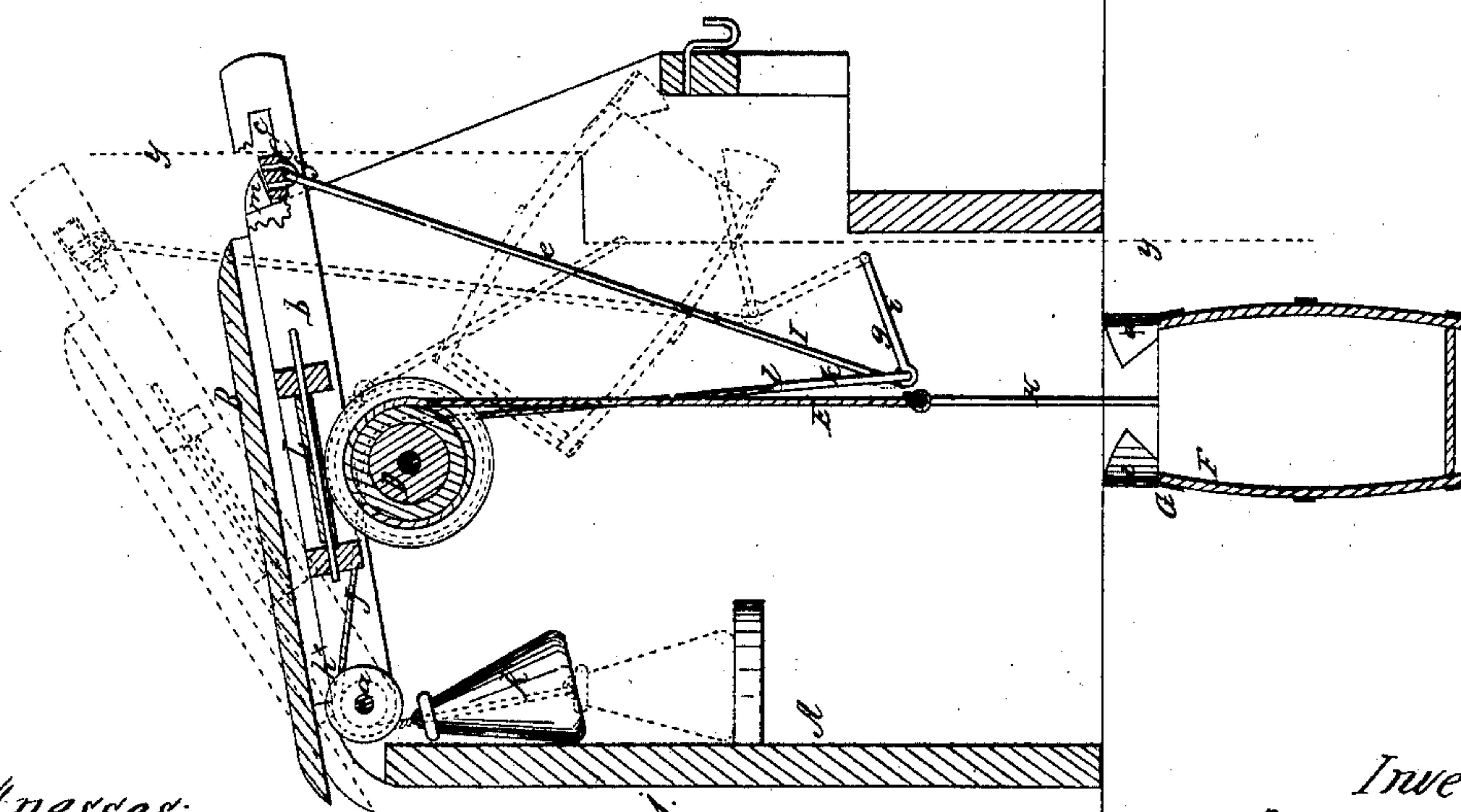


Fig. 1.

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UNITED STATES PATENT OFFICE.

WILLIAM PAINTER, OF AFTON, IOWA.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. 45,339, dated December 6, 1864.

To all whom it may concern:

Be it known that I, WILLIAM PAINTER, of Afton, in the county of Union and State of Iowa, have invented a new and Improved Water-Elevator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention taken in the line *x x*, Fig. 2; Fig. 2, a front sectional view of the same taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and improved device for elevating water from wells, and is designed for domestic or household purposes.

The object of the invention is to obtain a water-elevator of the kind specified which will be simple in construction, admit of the bucket being raised and tilted with facility, and which will be capable of retaining or holding the bucket at any desired point.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a well-curb, which may be of rectangular or other proper form, and provided with a cover, B, the back end of which is fitted on a rod, *a*, so that it may turn or work thereon like a joint or hinge. The cover B has two side bars, *b b*, which extend forward some distance in front of it, and have each an oblong slot, *c*, made horizontally in them, in which the ends of a bar, C, are fitted and allowed to work freely forward and backward.

In the upper part of the well-curb A there is placed a windlass, D, to which the bucket-rope E is attached; and F is a bucket the upper end of which has a hoop, G, upon it provided with two flanges, *d d*, at opposite sides. The rope E is attached to a bail, H, which may be of the usual form, and attached to the bucket some distance below its upper end, as shown clearly in Fig. 2.

I represents the bucket-tripping device, the upper part, *e*, of which is of bail shape, and is connected at its upper end by a staple, *f*, to the bar C. The lower part, *g*, of the tripping-device is composed of a rod the ends *h* of which are fitted in the sides of the curb A and allowed to turn freely therein. This rod

g is bent at right angles to the ends *h*, so as to form an arm, *i*, at each side, and it is then bent inward for a short distance at each end of *i i*, as shown at *j j*, and then bent upward at right angles to *i i*, as shown at *k k*, the ends of *k k* being connected by a continuation, *l*, of the rod, which may be all in one piece. The upper part, *e*, of the tripping device is connected to the part *g* at the parts *j j*, and the part *l* of *g* is in line with the path of the movement of the bucket F.

J is a cord, which is attached to one of the parts *j* of the part *g* of the tripping device and passes once around the shaft of the windlass, over a pulley, *h*^x, on the rod *a*, and has a weight, K, attached to it.

To the under side of the cover B of the curb there is attached a board or plate, L, which bears upon the windlass D and prevents the same from turning—that is to say, when the cover B is pressed down upon the windlass, and the cover, when the windlass is not in use, is thus kept down, in consequence of the ends of the bar C being underneath lips or projections *m m*, at each side of the curb, as shown in Fig. 1.

The operation is as follows: Suppose the bucket F to be suspended in the well, as shown in both figures, and it is designed to draw a bucket of water. The operator draws outward the bar C from underneath the lips or projections *m m*, and thereby releases the windlass D from the pressure of the cover B, and the bucket is allowed to descend into the well and become filled. The windlass D is then turned and the filled bucket elevated, and the hoop G will strike the part *l* of the lower part, *g*, of the tripping device, a flange, *d*, of said hoop catching under the part *l* and raising *g*, and also *e*, until the bar C reaches the front end of the slots *c*, the cover B being raised up by this movement of *e* and the bucket F tilted so that its contents will be discharged into a pail or any receptacle placed or suspended under an opening in the side of the curb. After the bar C is drawn out from underneath the lips or projections *m m*, the windlass-shaft, in consequence of the cord J passing around it, will keep the bar C out from said lips or projections while the bucket is being raised, the weight K resting on a bracket, *a*^x, in the well-curb. When the windlass is released, a few turns of it under

the gravity of the empty bucket allows the tripping device to descend to its former position, and the bar C is drawn underneath the lips or projections *m m* and the bucket held in a suspended state; and, if the windlass is released from the hand momentarily at any time while elevating a filled bucket, the latter will also be held or prevented from descending into the well.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The cover B, placed on the curb A, as shown, in connection with the latch or fastening composed of the bar C and lips or projections *m m*, and connected with the bucket-tripping device I, and the latter connected with the windlass-shaft, substantially as and for the purpose herein set forth.

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Witnesses:

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