

Taylor & Larned, Windlass Water Elevator,

No. 30,894.

Patented Dec. 11, 1860.

Fig. 3.

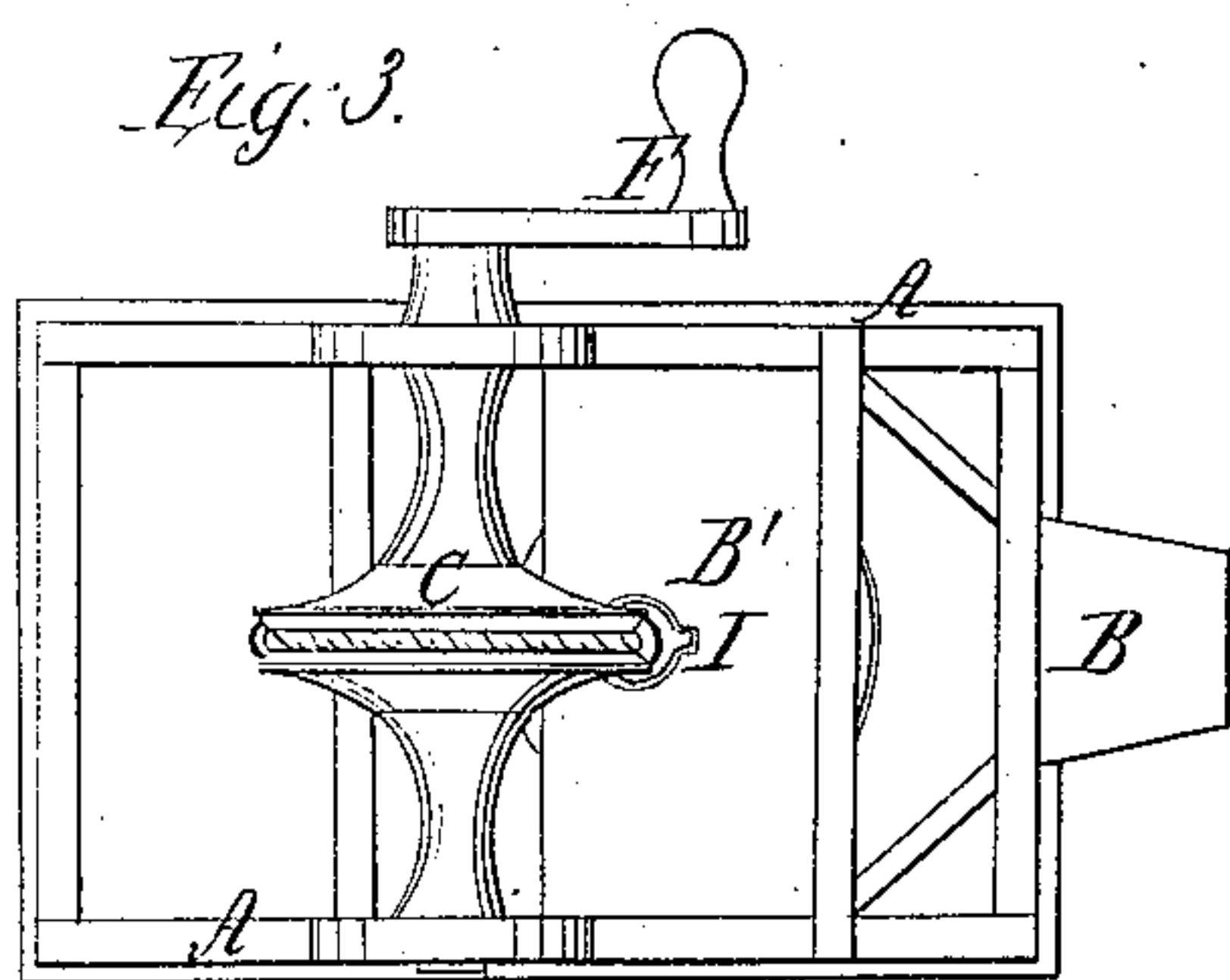


Fig. 4.

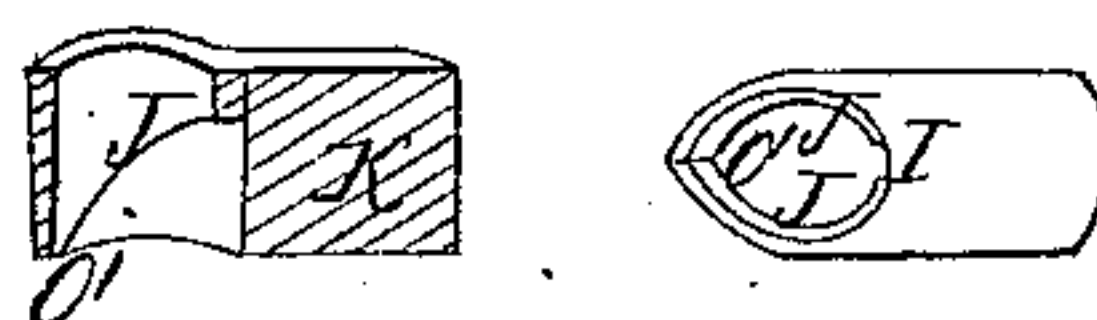


Fig. 1.

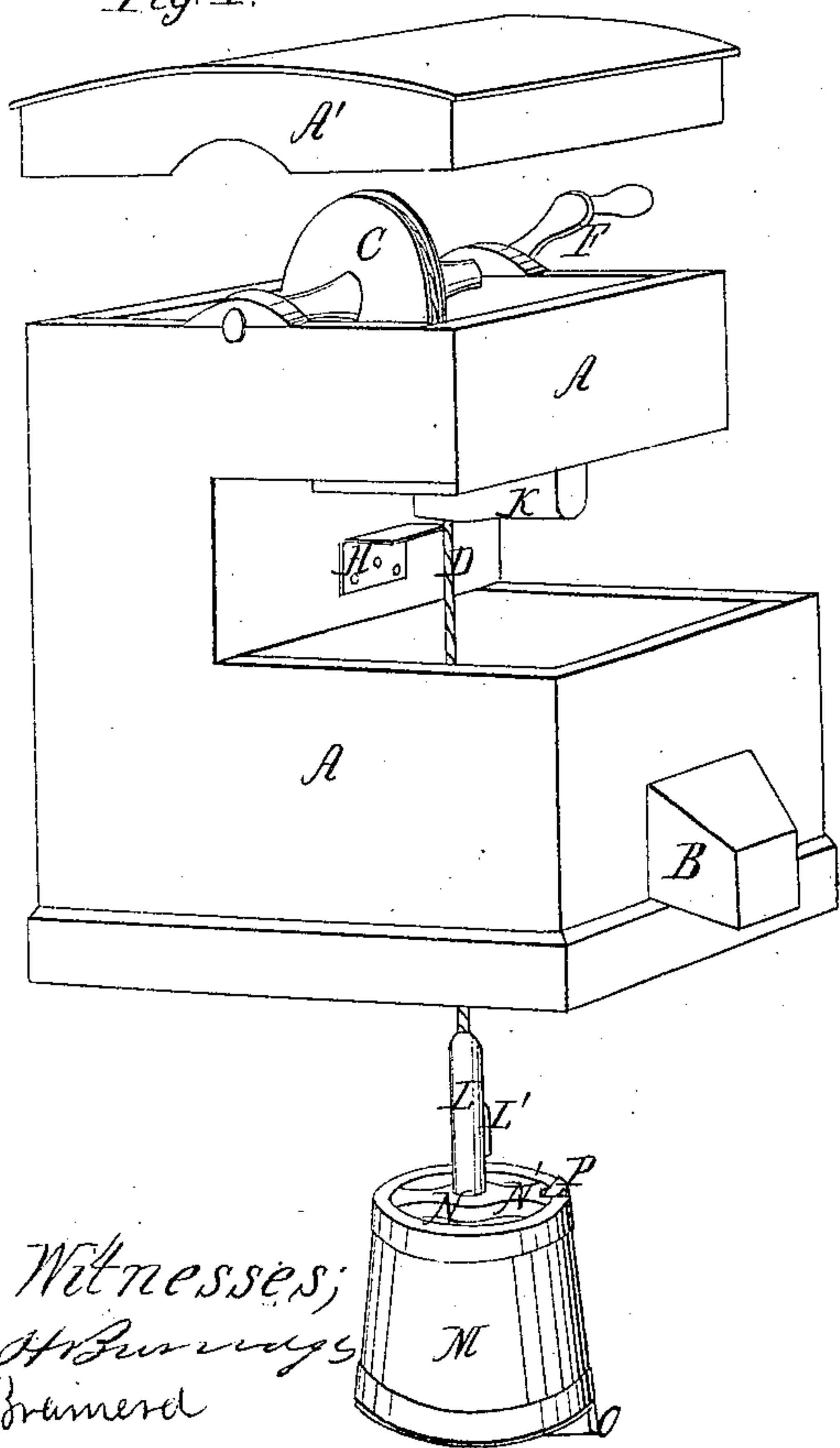
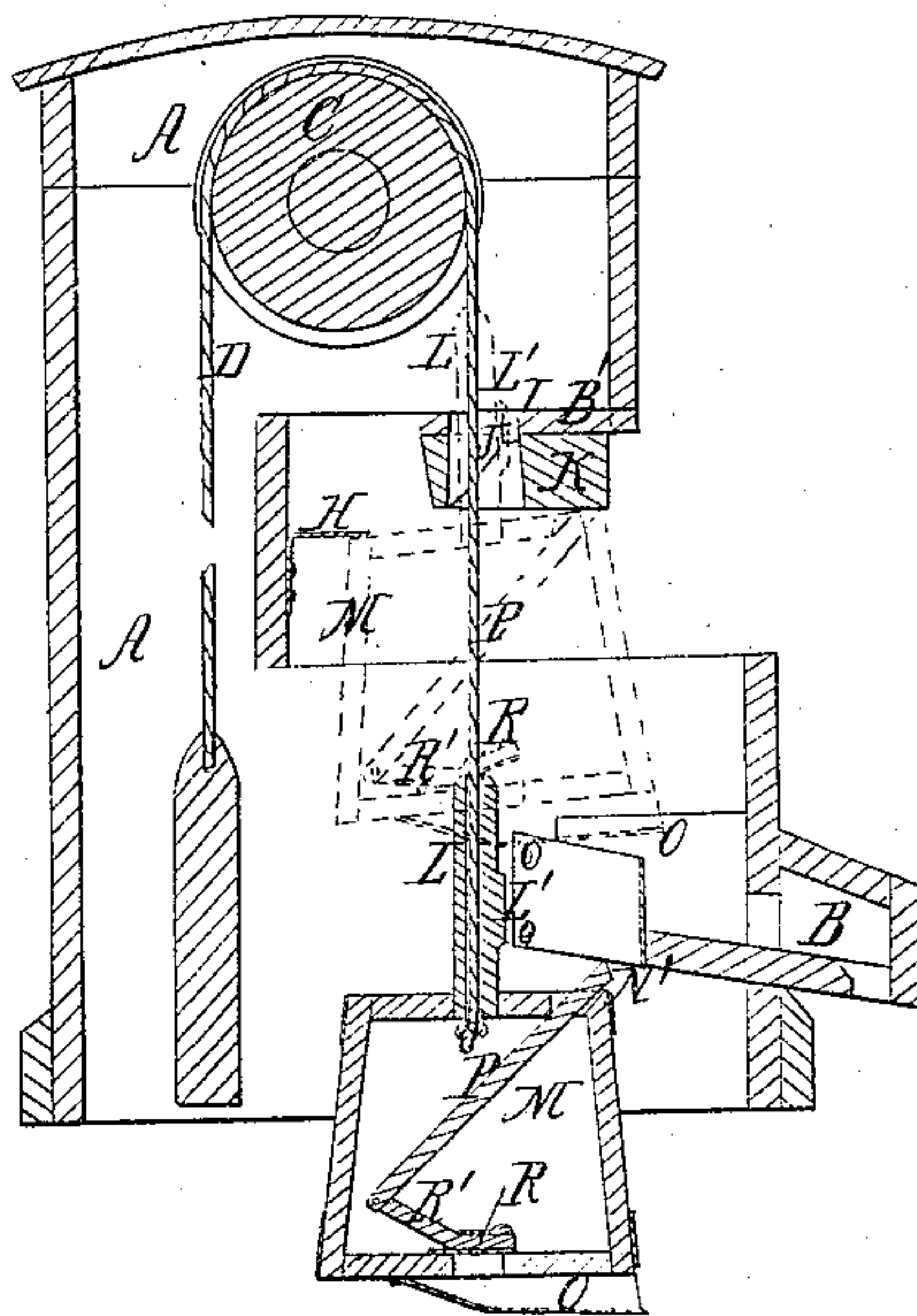


Fig. 2.



Witnesses;
H. Burrage
J. Brainerd

Inventors;
E. Sumner Taylor
H. S. Larned

UNITED STATES PATENT OFFICE.

E. S. TAYLOR AND H. S. LARNED, OF CLEVELAND, OHIO.

WATER-ELEVATOR.

Specification of Letters Patent No. 30,894, dated December 11, 1860.

To all whom it may concern:

Be it known that we, E. S. TAYLOR and H. S. LARNED, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Water-Drawers; and we do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view. Fig. 2, is a vertical section. Fig. 3, is a view of the top with the cover removed, and Fig. 4, represents detached sections.

Like letters denote the same parts in the different views.

Our improvement relates to an arrangement of devices for raising the bucket, so that the spout of the bucket will be facing the spout of the curb; which arrangement consists of a hollow cylindrical shaft, through which the rope passes; secured to, and rising upward from the center of the bucket; having a nib on one side; facing in the direction of the spout of the bucket. As the bucket is drawn up, this shaft passes through a pipe box, and if the bucket is turned more or less, the nib on the shaft slides up one of two spirally inclined planes, on the inside of the pipe, into a niche, that brings the spout of the bucket around directly facing the spout of the curb, at the same time, the front part of the bucket is tipped up, by the upper edge coming in contact with a lip secured to the curb, while the front edge is brought up against the pipe box.

In the figures A, represents the curb, or drawer, which may be of any appropriate form.

A', Fig. 1, is the cover removed to show the arrangement of the pulley C, and rope D, which is operated by the crank F.

H, is a lip secured to the frame, used for tipping the bucket.

M, Fig. 1, is a perspective view of the bucket, with a piece N, across the top, to which is secured the hollow shaft L.

L', is the nib, which is on the same side of the shaft, that the spout O, is of the bucket.

In Fig. 2, which is a vertical section, is shown the construction and operation of the valve R, in the bottom of the bucket, which

is secured to the bucket by means of a leather packing, underneath the valve, that answers the purpose of a hinge. To the end of the piece R', of the valve, is connected, by a pin on which it moves, the rod or piece P, that passes up through a slot N', in the piece N, and in the edge of the bucket. The hollow shaft L, with the rope passing through it, is also clearly shown in this figure. The position of the bucket after it is drawn up, is indicated by the dotted lines. As the shaft passes up through the pipe box K, which is secured to the piece B', if the bucket is turned around, the nib L', passes up the inclined plane J, or one similar to it on the other side of the pipe into the niche I, which brings the mouth of the spout O, in the lower part of the bucket, around facing the mouth of the spout B, of the curb. At the same time the front part of the bucket is tipped up and brought over the spout B, by means of the upper edge, of the back part of the bucket; coming in contact with the lip H, while the front edge is brought up against the pipe box K, thereby tipping up the front of the bucket, and bringing the spout O, directly over the spout B. At the same time piece P, pressing against the pipe box, forces open the valve R, in the lower part of the bucket, as indicated by the dotted lines. With this arrangement of the shaft and pipe box, it is impossible for the bucket not to be brought up over the spout of the curb, in the right direction, for as the inclined planes J, form an acute angle, as at O', Fig. 4, the nib L', cannot rest on that sharp point, and it must slide up one of the planes J, into the niche I, which brings the bucket around, and retains it in the right place, however much it may have been turned.

What we claim as our improvement and desire to secure by Letters Patent, is—

The nib L', spirally inclined planes J, J, and niche I, for facing the spout of the bucket O, to the spout B, of the curb, as specified, and in combination therewith the special arrangement of the lip H, and box K, for the purpose set forth.

E. SUMNER TAYLOR.
H. S. LARNED.

Witnesses:

W. H. BURRIDGE,
J. BRAINERD.