

J. W. WESTBROOKS.
Water-Elevators.

No. 156,194.

Patented Oct. 20, 1874.

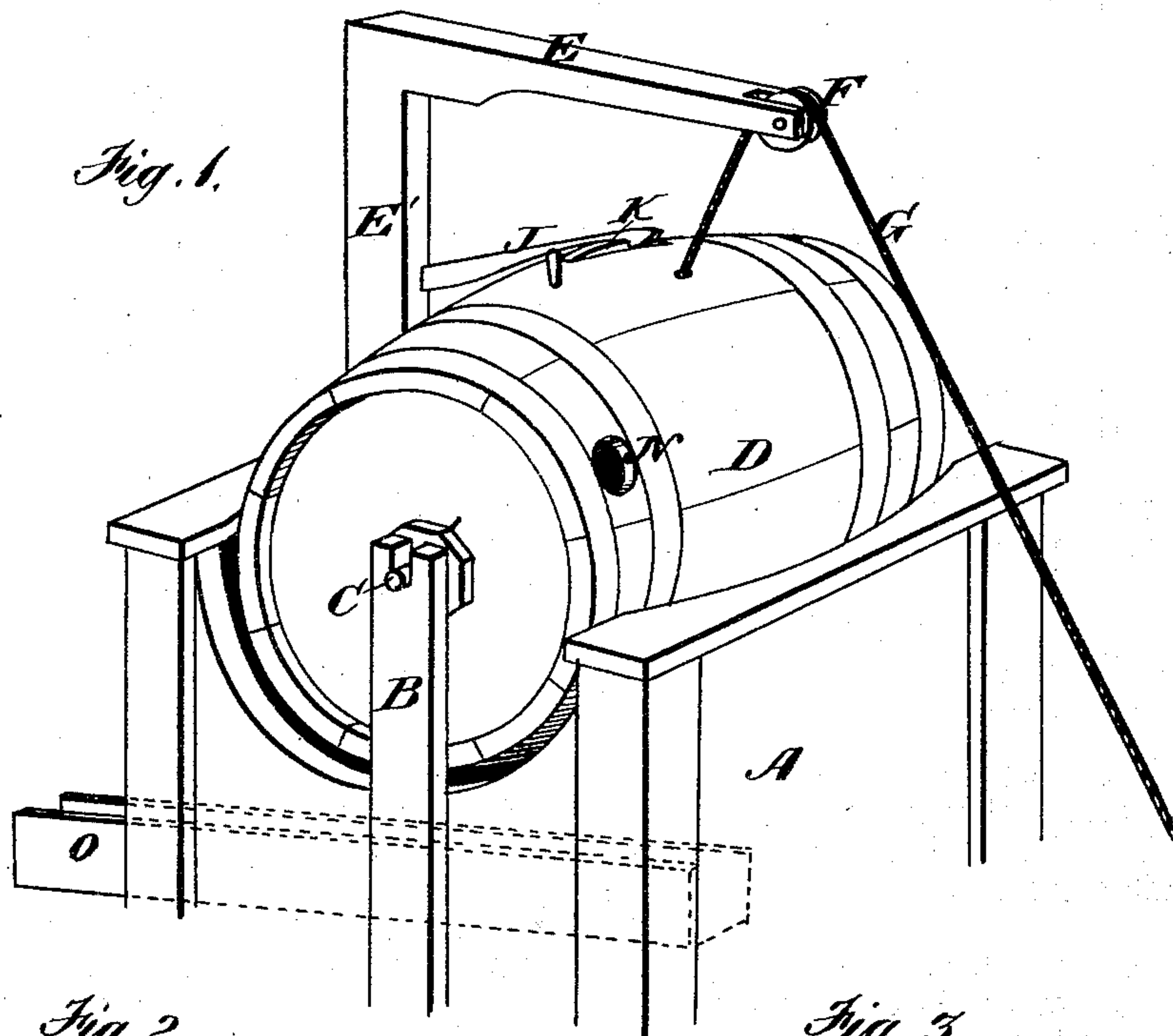
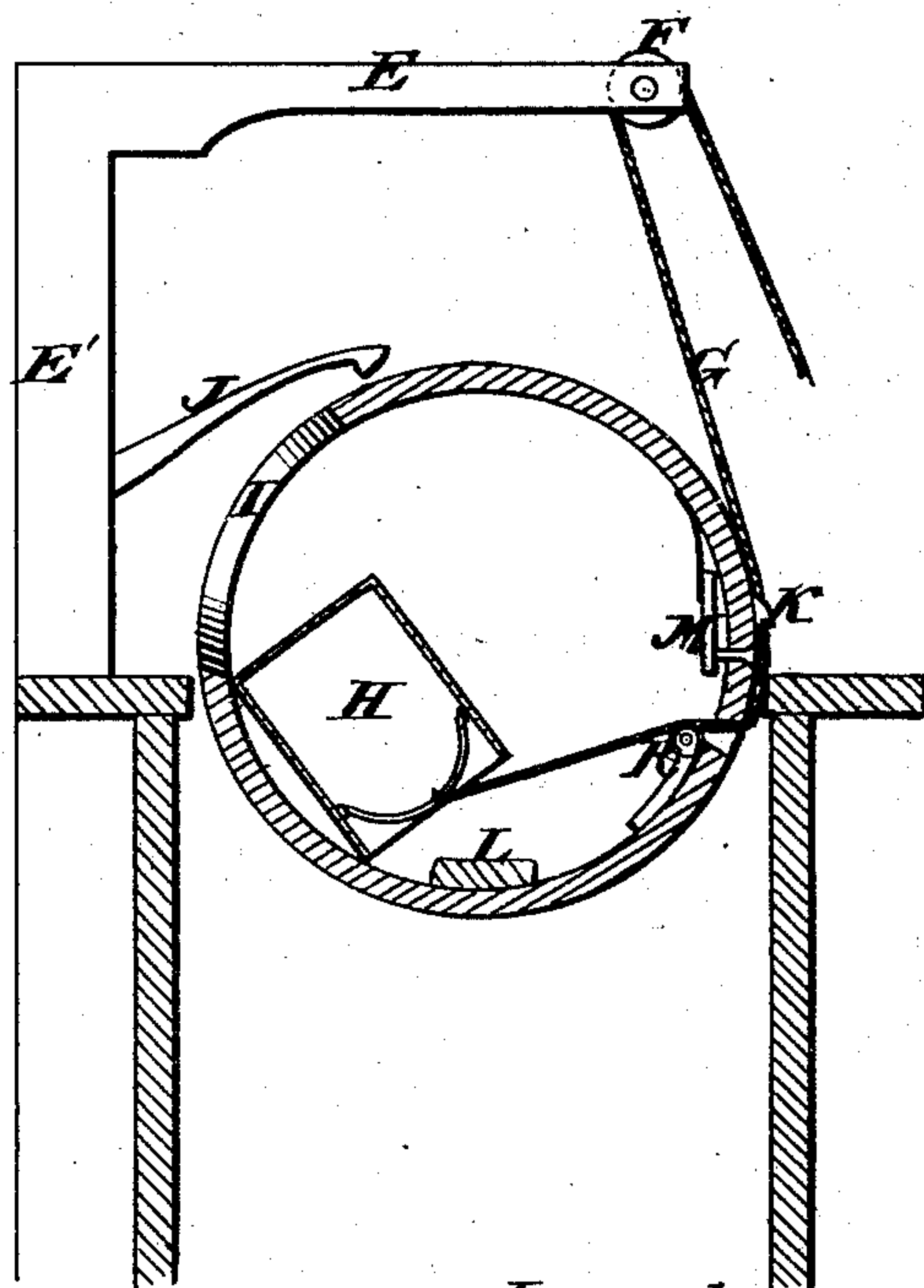
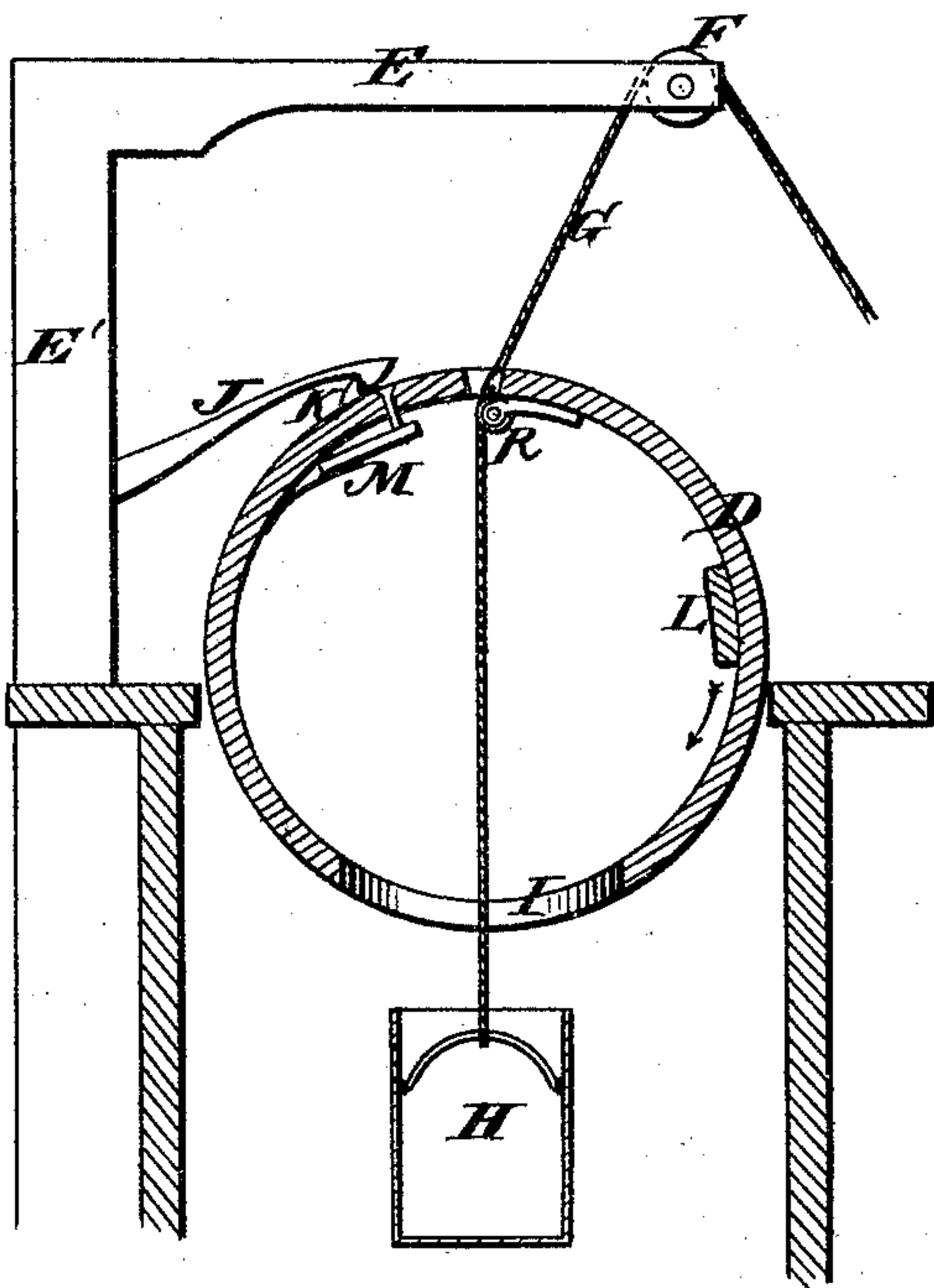


Fig. 2.

Fig. 3.



Witnesses.
C. F. Bourn.
Melville Church

Inventor
J. W. Westbrook.
by his Attys.
Hill & Ellsworth

UNITED STATES PATENT OFFICE.

JOHN W. WESTBROOKS, OF ABERDEEN, MISSISSIPPI.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. **156,194**, dated October 20, 1874; application filed August 15, 1874.

To all whom it may concern:

Be it known that I, JOHN W. WESTBROOKS, of Aberdeen, in the county of Monroe and State of Mississippi, have invented certain new and useful Improvements in Water-Elevators; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view; Fig. 2, a sectional elevation, showing the position of the parts before the bucket is emptied; and Fig. 3, a similar section, showing the bucket discharging.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention has for its object to provide a water-elevator adapted to raise water from a well to any desired height and discharge the same automatically.

To these ends my invention consists, mainly, in the employment of a cylindrical vessel or a cask weighted on one side, and located in suitable bearings, so as to oscillate therein above the mouth of a well or reservoir, and a bucket suspended from a point above the vessel or cask, its suspending rope or chain passing through said cask, which latter is provided in its lower portion with an opening adapted to admit of the passage of the bucket in ascending and descending.

My invention also consists in the employment of certain minor devices, in connection with those above mentioned, the whole operating in such manner that, when the bucket filled with water is elevated it strikes against the upper portion of the inside of the cask. The latter is caused to rotate on its axis sufficiently to tilt the bucket and discharge the water into the cask, from which it escapes through a suitable vent, and is conveyed away by a spout, the cask afterward turning back to its former position, righting the bucket and allowing it to descend, all of which I will now proceed to describe.

In the drawings, A represents a casing or well-curb, having standards B, adapted to receive trunnions C projecting from the ends of the cask D, the latter rotating freely in its bearings. The casing A is preferably recessed,

so as to receive the lower half of the cylindrical vessel or cask D, as shown. E represents a horizontal arm attached to a standard, E', rising from the casing A. The arm E projects over the cask, and its outer end is provided with a pulley, F, the latter being located in front or at one side of a vertical plane passing through the axis of the cask. G represents a rope or chain, passing over the pulley F and through a small orifice in the upper part of the cask D, within which it is attached to a suitable bucket, H, of such size as to be received, with its bail, in the cask. In the lower portion of the cask is an orifice, I, adapted to permit the passage of the bucket H as the latter ascends or descends. J represents a spring or other latch, attached to the standard E and projecting over the cask D, so as to engage with a catch, K, on the periphery of the latter, and hold it in the position shown in Fig. 2. The cask is weighted slightly on one side, as shown at L, the weight tending to give it a partial rotation in the direction of the arrow, when released from the latch J, by the means hereinafter described.

The bucket, being lowered and filled with water, is raised by operator at the end of the rope until it enters the cask through the opening I and strikes against a tripping-lever, M, which is attached to the inside of the cask, under the latch K, and has a stud or pin, which projects through the cask and bears against the end of said latch. Consequently, when the lever M is raised by the ascending bucket, its stud disengages the latch from the projection K on the cask, and the latter, influenced by its weight L and the lateral force exerted by the rope, which pulls from a point at one side of the axis of the cask, as above mentioned, turns sufficiently to catch the bucket on one side of the opening I, when the rope being slackened the bucket tilts and partially rotates the cask, the water being discharged into the latter, and escaping through an orifice, N, into a spout or trough, O. To return the cask to its former position, it is only necessary to pull on the rope, which, pulling upward on the side of the orifice through which it passes, causes the barrel to turn until its catch or projection engages with the latch, as before, the bucket being now directly

over the opening, and passing readily through the same on its next descent.

This device is cheap, simple, and can be constructed by means within the reach of almost any farmer or mechanic. It can be elevated to any desired height above the well, as it does not require any manipulation by the operator other than the pulling of the rope, as above described, which can be performed at a distance, the rest of the operation being entirely automatic.

The interior of the cask may be provided with a friction-roller, R, at the point where the rope passes through its upper portion.

I claim as my invention—

1. In a water-elevator, a vessel or a cask adapted to oscillate in suitable bearings above the mouth of the well, in combination with a

suspended bucket, whose rope or chain passes through the oscillatory vessel, the latter being provided with an opening in its lower portion, for the admission and egress of the bucket, and with a suitable latch and tripping arrangement, substantially as described, and for the purpose specified.

2. The oscillatory vessel D, provided with the opening I, projection K, and tripping-lever M, in combination with the bucket H, rope G, pulley F, and latch J, all arranged and operating substantially as described, for the purpose specified.

JOHN W. WESTBROOKS.

Witnesses:

J. G. RANDLE,
I. M. MATHENY.