

W. MASON.
Water-Elevators for Wells.

No. 153,005.

Patented July 14, 1874.

Fig. 1

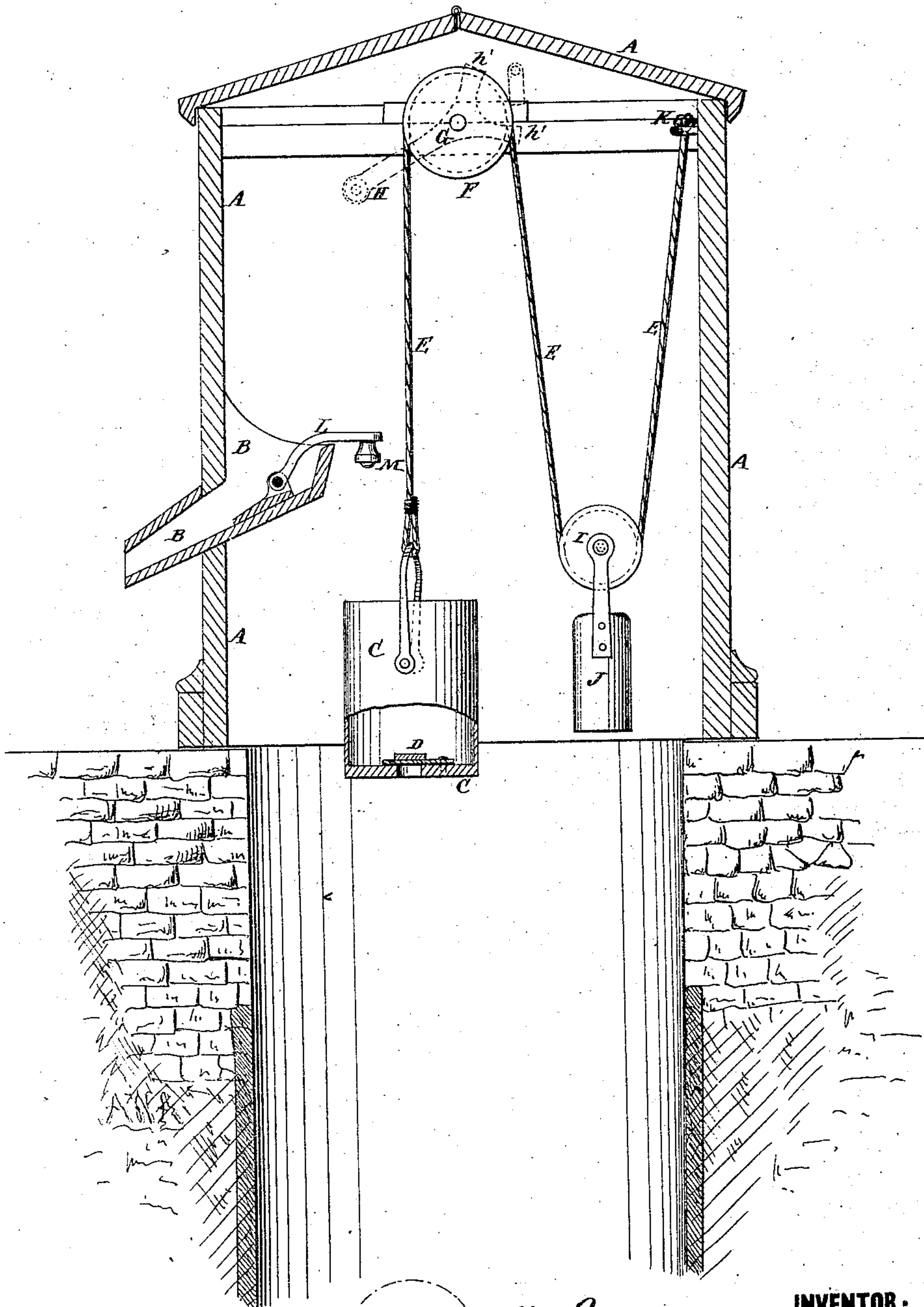
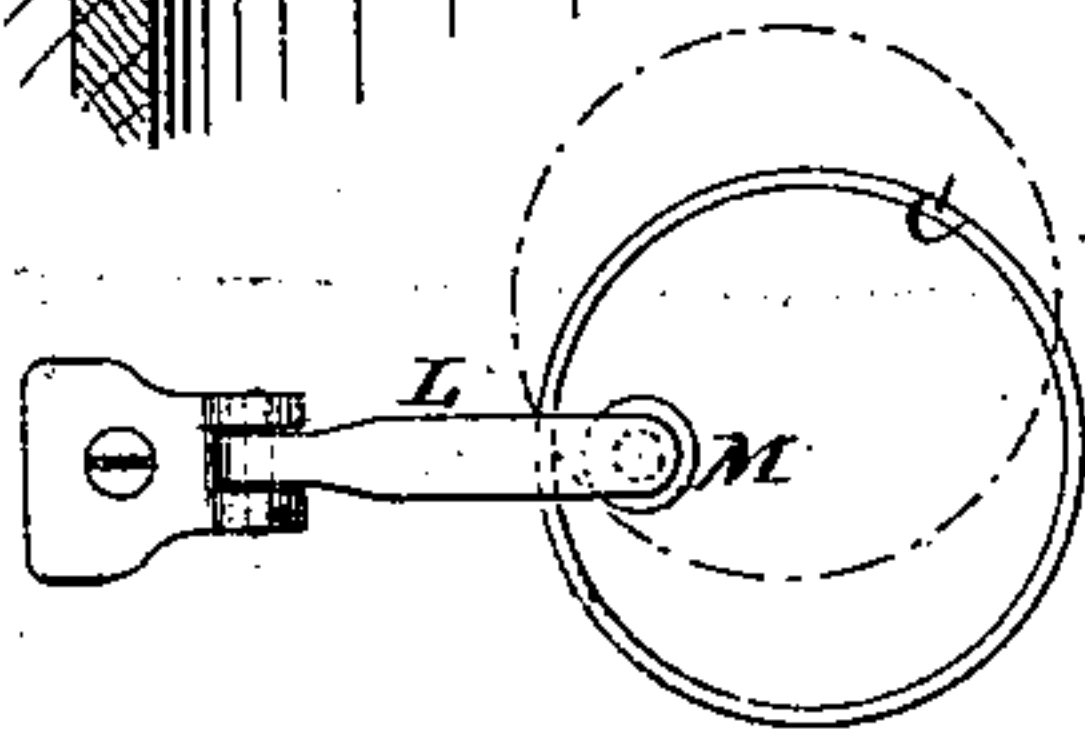


Fig. 2



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM MASON, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN WATER-ELEVATORS FOR WELLS.

Specification forming part of Letters Patent No. **153,005**, dated July 14, 1874; application filed March 28, 1874.

To all whom it may concern:

Be it known that I, WILLIAM MASON, of the city and county of Providence, Rhode Island, have invented a new and useful Improvement in Water-Elevator for Wells, of which the following is a specification:

Figure 1 is a side view of my improved water-elevator, shown as applied to a well-curb, the curb being shown in section, and Fig. 2 is a detail view illustrating the operation of the trip-arm and its friction wheel or roller.

My invention has for its object to furnish an improved device for raising water in wells, and more especially in deep wells, which shall be simple in construction and convenient in use, being so constructed as to enable the water to be raised with more ease than when the ordinary elevators are used.

The invention will first be fully described, and then pointed out in the claim.

A represents a well-curb, which is provided with a spout, B, in the ordinary manner. C is the bucket, which may be made of metal or wood, and which should be provided with a valve, D, in its bottom, to allow it to be readily filled with water when lowered. To the bail of the bucket C is attached one end of a rope, E, which passes over a pulley, F, attached to a shaft, G, which revolves in bearings in the upper part of curb A, and to one end of which is attached the crank H, by which it is turned to raise and lower the bucket. The crank H may be provided with one or more short arms, *h'*, to strike against a button, pin, or other stop attached to the curb A, to support the bucket in any desired

position. The rope E passes around a pulley, I, pivoted to a weight, J. The other end of the rope E is secured to the upper part of the curb A, as shown at the point K in Fig. 1. In the inner part of the spout B is pivoted the outer end of a bent bar or arm, L, the inner end of which projects sufficiently to catch upon the edge of the bucket C as it rises above the inner end of the said spout B, and till it discharges the water automatically into said spout. Upon the lower side of the inner end of the arm L is pivoted a small friction wheel or roller, M, which, should the bucket C rise in such a position that the arm L may catch upon the edge of said bucket near one end of the bail, may roll along said edge to a position midway between the ends of the said bail, so as to discharge the water properly into the spout B. Without the friction-roller M the arm L would not slip upon the edge of the bucket C, especially in the case of a wooden bucket, but would remain where it first took hold of it, so that the water would not always be properly discharged into the spout.

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

The pivoted arm L and friction wheel or roller M, for tilting the bucket C as it rises above the spout B, substantially as herein shown and described.

WILLIAM MASON.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.