

J. F. LATIMER.

Water Elevator.

No. 104,605.

Patented June 21, 1870.

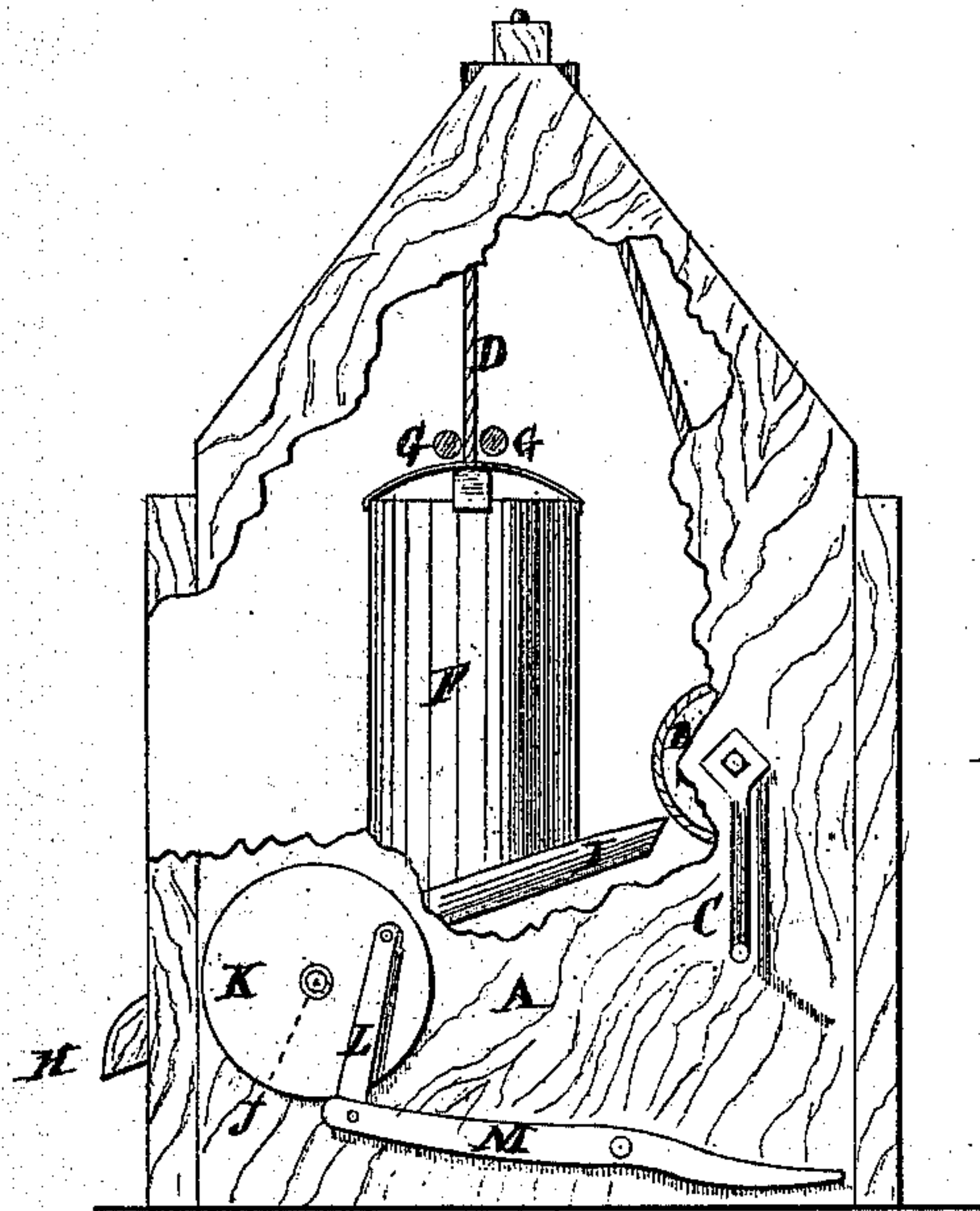


Fig. 1

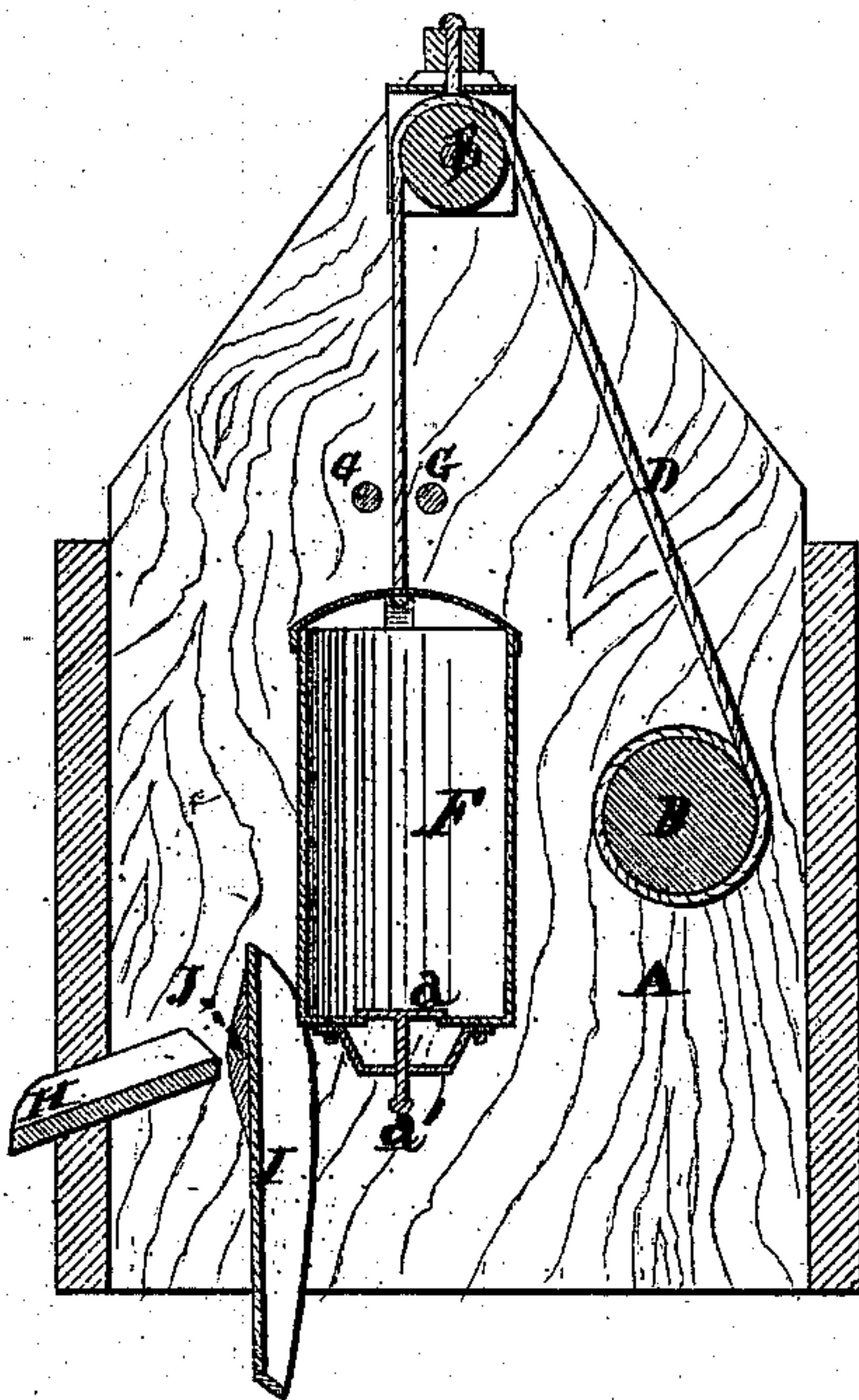


Fig. 2

ATTEST

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JAMES F. LATIMER, OF DETROIT, MICHIGAN.

Letters Patent No. 104,605, dated June 21, 1870.

IMPROVEMENT IN WATER-ELEVATOR.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, JAMES F. LATIMER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Water-Elevators; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being part of this specification, in which—

Figure 1 is a side elevation of my improvement, with part of the well-curb broken away.

Figure 2 is a vertical section of the same.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in the method of discharging water from a well-bucket when raised to the curb, and consists in the novel and peculiar construction of a tilting spout, and in the mechanism for operating the same in such a manner that, when the full bucket is drawn up in the curb, by depressing a treadle, the spout is brought under the bucket, striking and lifting the spindle of a valve in its bottom, allowing the water to escape into the spout, which conducts it to the discharge-trough or spout of the curb, as more fully hereinafter set forth.

In the drawing—

A represents a well-curb, in which is journaled a drum, B, rotated by a crank, C.

D is the hoist-rope, one end of which being fastened to the drum, the other is led through a pulley, E, suspended from the cross-beam at the top of the curb, and secured to the bail of the well-bucket F, as shown.

a is a valve, closing an opening in the bottom of the bucket, and is provided with a spindle, a', which projects below the plane of the bottom of the bucket.

G are cross-bars in the upper part of the curb, which prevent the bucket from being raised above them, and

H is a trough or spout at one end of the curb.

I is a spout, secured near its end to a shaft, J, transversely journaled in the curb a little above the spout H, and having secured to it, outside the curb, a face-plate or crank-disk, K, from whose wrist depends a connecting-rod, L, coupling the same to a treadle, M, pivoted in the wall of the curb.

The operation of the device is very simple, for, as the full bucket is elevated to the cross-bars G, the attendant places his foot on the treadle, causing the shaft J to make a partial rotation, bringing the free end of the spout I under the bucket, lifting the valve therein, and allowing its contents to flow out into the spout, which discharges the same into the trough H, which conducts the water into a vessel placed to receive it.

Any suitable ratchet or stop-device may be placed on the drum-shaft, to retain the bucket when elevated, if desired.

During cold weather, the bucket may be kept suspended in the water to prevent freezing, while the device has the advantage of being simple, easy to operate, not liable to get out of order, and cheap of construction.

I expressly disclaim the invention of the valve in the bottom of the bucket, or any novelty in the curb or devices for raising the bucket; but

What I do claim as new, and desire to secure by Letters Patent, is—

The water-elevator, described and shown, consisting of the drum B, provided with a suitable crank, the rope D, the pulley E, the bucket F, provided with valve a a', the spout I, pivoted upon shaft J, the disk K, pitman L, treadle M, stationary spout H, and cross-bars G, when the several parts are constructed and arranged as shown and described, and for the purposes set forth.

JAMES F. LATIMER.

Witnesses:

FREDERICK EBERTS,
SAMUEL J. SPRAY.