Louis F. Fischer's Water Carrier.

PATENTED JUL 18 1871

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Fig. 1.

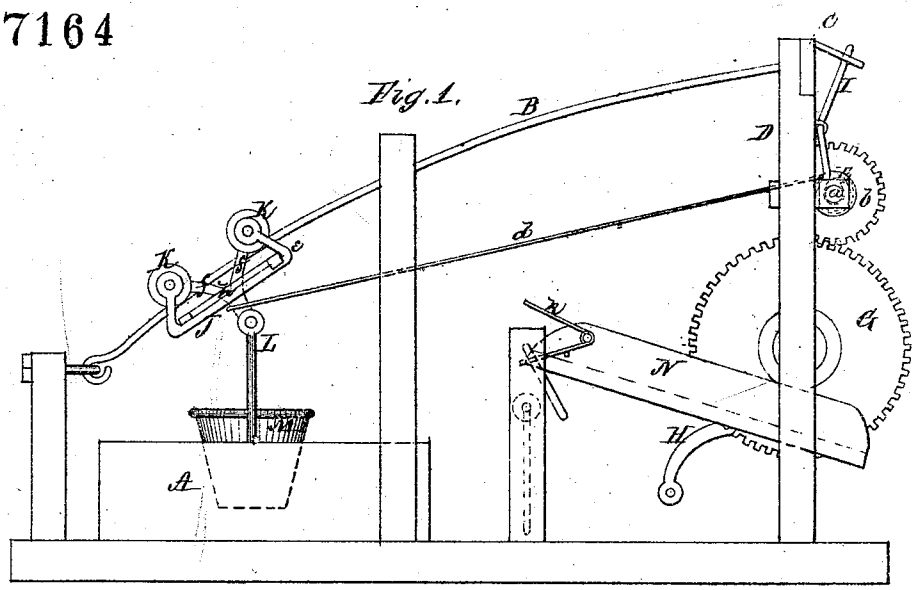


Fig. 2.

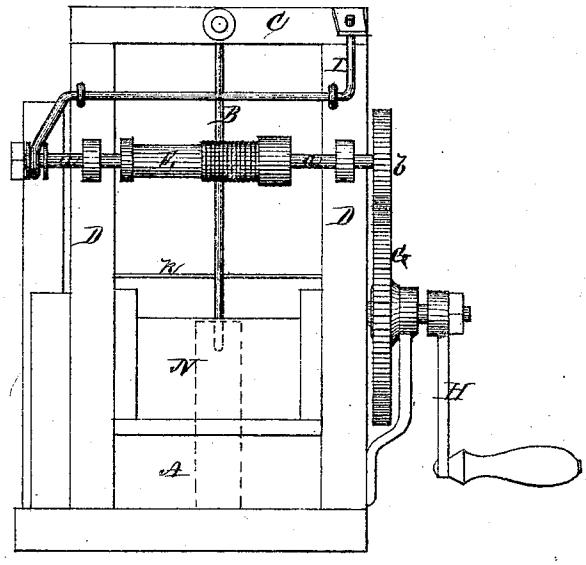
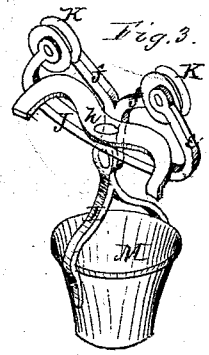


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS F. FISCHER, OF FENNIMORE, WISCONSIN.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. 117,164, dated July 18, 1871.

To all whom it may concern:

Be it known that I, LOUIS F. FISCHER, of Fennimore, in the county of Grant and State of Wisconsin, have invented certain new and useful Improvements in Water-Carrier; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a water-elevator, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation; Fig. 2, a front view of my elevator; and Fig. 3 is a perspective of the carriage arrangement.

A represents a well, down into which a rod, B, is intended to pass for any suitable distance. This rod should go down below the water-line in the well, and above the well it turns to be nearly horizontal. Its lower end is secured in any suitable manner within the well, while the upper end is attached to a cross-bar, C, connecting two upright standards, D D, placed a suitable distance from the well. In suitable journal-boxes on these standards is placed a horizontal shaft, *a*, upon which is a windlass-head, E, and on one end a pinion, *b*, which gears with a cog-wheel, G, mounted upon an arbor on the side of one of the standards D. Upon the same arbor is a crank, H, by means of which said wheel is turned, thus imparting motion to the windlass E. The shaft *a* can be moved sidewise in its journal-boxes by means of the lever I, so as to throw the pinion *b* in and out of gear with the cog-wheel G. The well-rope *d* attached to the windlass E is connected with the carriage J, which moves upon the rod B. This carriage is constructed in the following manner: A bar, *e*, of suitable length, has its ends turned upward and slightly inward, and in the extreme ends are inserted the rounded ends of two other bars, *f f*, which extend downward and inward, and connected together a suitable distance below the bar *e*. The rounded ends of the bars *f f* form journals for two grooved wheels, K K, which are placed upon the rod B. At the joint of the two rods *f f* is formed a pivot-joint with the bail L of the bucket M, so that the bucket can always hang downward while the carriage moves up and down on the rod B. In the center of the bar *e* of the carriage J is pivoted a curved latch, *h*, which prevents the carriage from coming off the rod while going up and down on the same in the well.

The operation of my elevator is readily seen, and needs no description. When the bucket has ascended from the well and gone a short distance to one side thereof, and is to be emptied, it strikes a double guide-wire, *k*, attached to a spout or trough, N. This guide-wire is composed, properly speaking, of two guides attached together and pivoted at the sides of the spout. One of them catches over the edge of the bucket, and, as it is raised by the forward motion of the bucket, the other strikes the side of the bucket, tipping the same and emptying the water. When the water is emptied the shaft *a* is moved so as to throw the pinion *b* out of gear, and the bucket will descend again into the well of its own gravity.

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

1. The arrangement of the carriage J, wheels K K, latch *h*, bail L, and bucket M, all substantially as shown and described, and for the purposes herein set forth.

2. The combination, in a water-elevator, of the rod B, windlass E, lever I, carriage J with latch *h*, bucket M, spout or trough N, and guide-wire or tripping-device *k*, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LOUIS F. FISCHER.

Witnesses:

ISAAC MCDONALD,

S. I. WALKER.