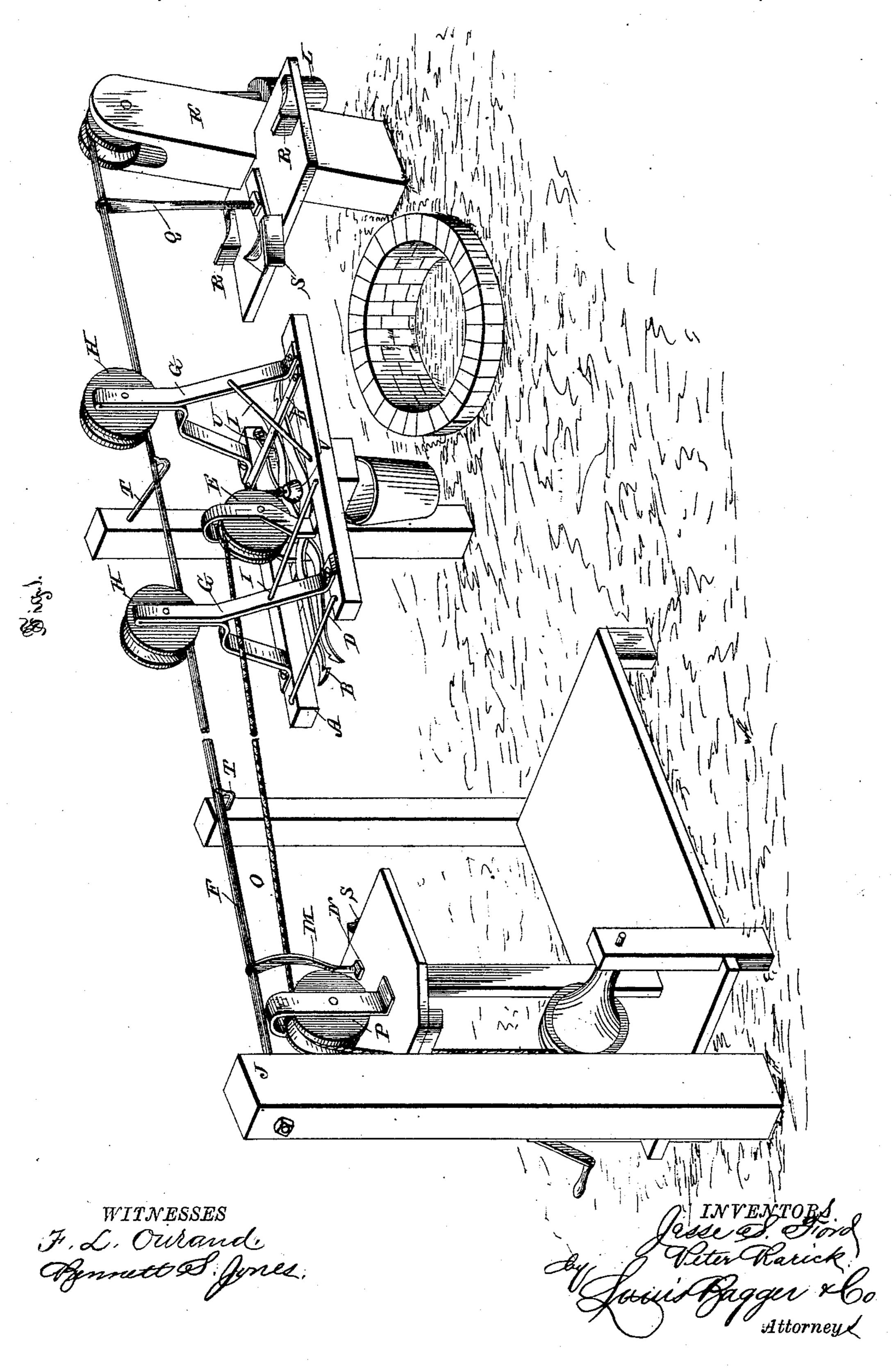
J. S. FORD & P. RARICK. WATER ELEVATOR AND CARRIER.

No. 353,214.

Patented Nov. 23, 1886.

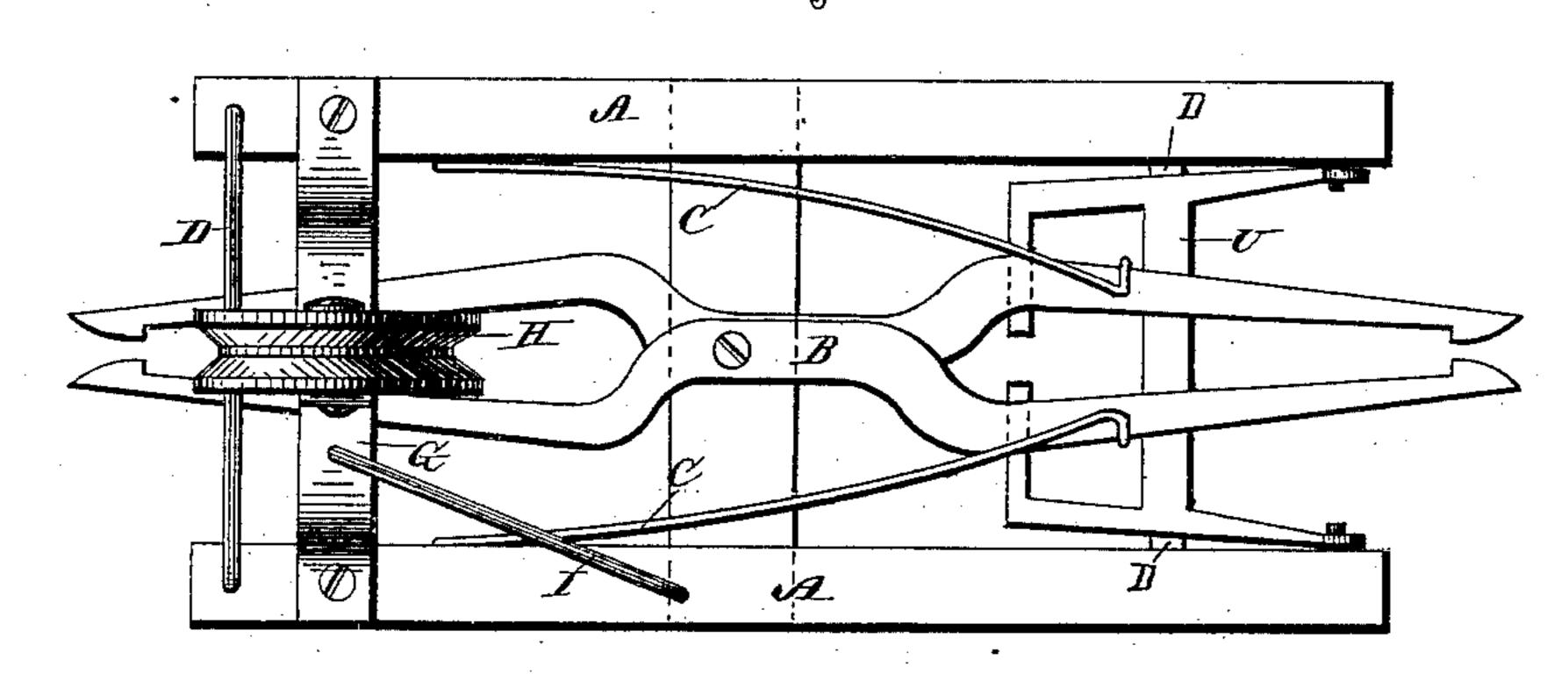


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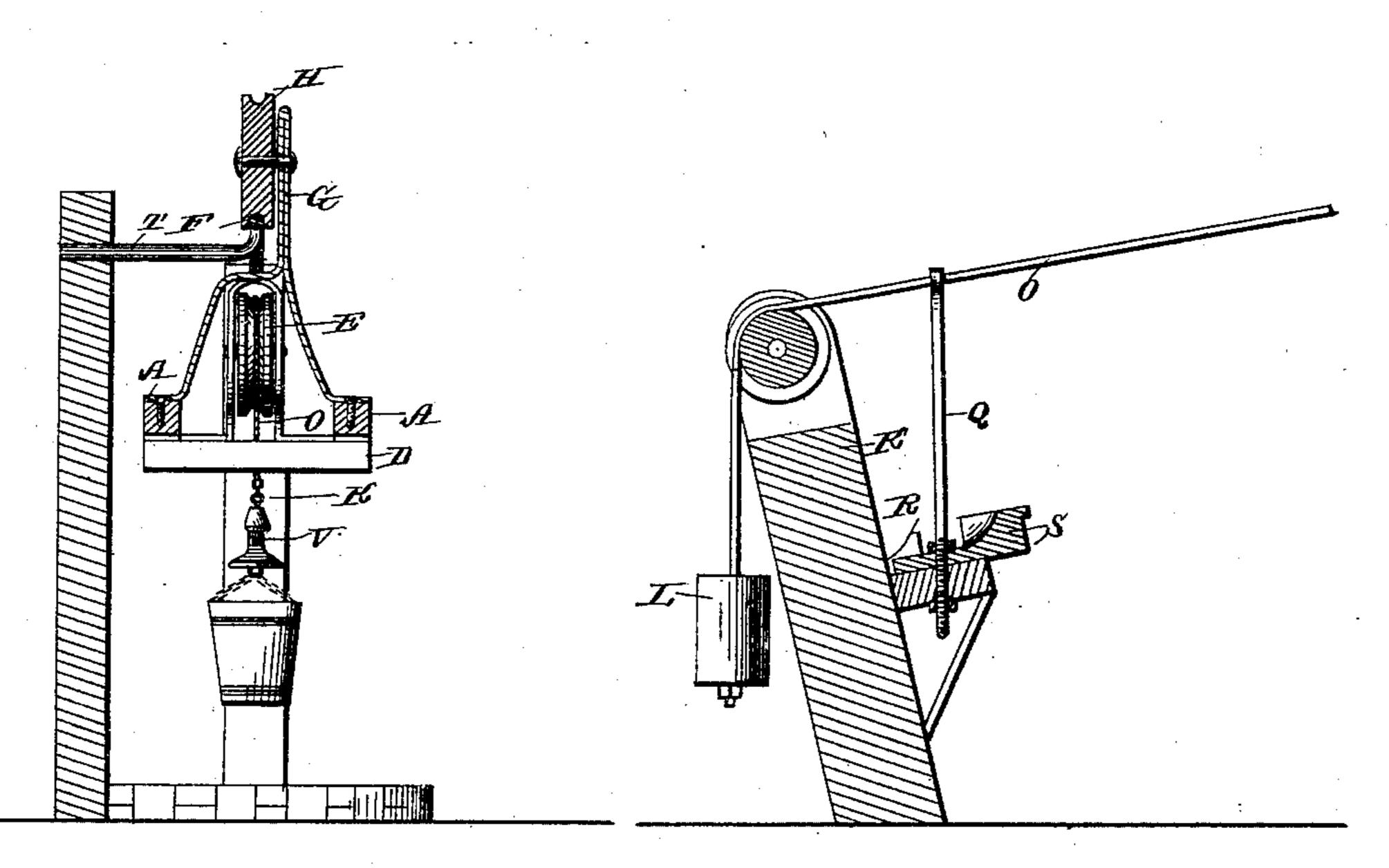


Fig. 5.

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Attorney

United States Patent Office.

JESSE S. FORD, OF OHIO COUNTY, AND PETER RARICK, OF OWENSBOROUGH, KENTUCKY.

WATER ELEVATOR AND CARRIER.

SPECIFICATION forming part of Letters Patent No. 353,214, dated November 23, 1886.

Application filed September 20, 1886. Serial No. 214,021. (No model.)

To all whom it may concern:

Be it known that we, JESSE S. FORD, of Ohio county, Kentucky, and Peter Rarick, of Owensborough, in the county of Daviess and 5 State of Kentucky, have invented certain new and useful Improvements in Water Elevators and Carriers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable 10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of our im-15 proved water elevator and carrier. Fig. 2 is a plan view of the carrier, showing the tripping device. Fig. 3 is a vertical section illustrating one of the carrier-hangers in its relation to carrier and track. Fig. 4 is a vertical sec-20 tion through the remote post and its appurtenances, and Fig. 5 represents a vertical medial section and a plan of the trip-washer.

Like letters of reference indicate corresponding parts throughout the several figures.

Our invention has relation to water elevators and carriers; and it consists in the improved construction of and combination of parts constituting the same, as will be hereinafter fully set forth.

The object of this invention is to make such improvements upon the elevator and carrier for which Letters Patent of the United States, No. 343,808, were granted to us on June 15, 1886, as will adapt the carrier to be run sus-35 pended from a weight-stretched wire or rope, or from a single wooden rail, also to add a new tripping device to the carrier and an improved trip-washer to the well rope or chain.

In the accompanying drawings, A represents 40 the side rails of the carrier-frame; B, the clamping-levers; C, their springs; D, the cross-bars, and E the central pulley, all of which parts are identical with those set forth in the patent above referred to.

The carrier is supported upon a single-strand track, F, by means of the hangers G, to the upper ends of which are journaled the grooved wheels H, and which are braced from the carrier-frame by rods I. Said track is represented 50 in the drawings as made of a wire, which is securely fastened to the proximate post, J, and

passed over a pulley in the upper end of the remote post, K, and held taut by the weight L. Intermediate supports are placed at intervals between said posts. The first one, M, 55 arises from a bracket, N, secured to the proximate post, and is bent to one side to allow the well-rope O to pass over a pulley, P, upon the bracket, whence said rope descends through a hole in the bracket to the windlass. The front 60 edge of said bracket acts as an abutment for the carrier. The last support, Q, is similar to the first one, though straight, and arises from a bracket attached to the remote post. Upon this bracket are placed abutments R, for stop- 65 ping the carrier at that end of its route. The wedges S are the same as described in the above-mentioned patent, and are secured one to each of the two brackets. The lower end of the supports M and D pass through these 70 wedges and are provided with jam-nuts, which permit said supports to be adjusted vertically, thereby providing for lowering or raising the track at those points, in order to keep the carrier with its clamping-levers in the proper re- 75 lation to the wedges. The other supports consist of posts set in the ground and provided with arms T at their upper ends, the outer end of each arm being bent vertically and bifurcated to receive the track.

It is evident that a rope may take the place of the wire here represented, or that a wooden rail may be permanently secured to the two posts and rested upon the intermediate supports to perform the same office.

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The tripping device consists of an H-shaped frame, U, pivoted by one end to the outer ends of the side rails of the carrier. The cross-bar of said device rests upon the lower bar, D, of the carrier and under the outer ends of the 90 clamping-levers. The free ends of the sides of said frame are turned inwardly, and likewise rest under said levers. It is against these ends of the tripping device that the trip-washer upon the well-rope strikes. This trip-washer 95 V consists of a cylindrical bar, provided with a conical head at its upper end and with a circular flange at its lower end. Said washer is formed about a rod provided with eyes at either end for attaching it to the well rope or chain. 100

In operating the apparatus the well-rope passes from the bucket up between the clamp-

ing-levers, over the pulleys F and P, and down to the windlass, and when the bucket is drawn up the trip washer strikes the tripping device, whose cross bar and bent ends make doubly 5 sure the disengagement of both of the clamping-levers from the wedges, and the conical head assists in entering the bar of said washer between the clamping-levers, and in holding said bar there till the carrier has reached its 10 destination. Other features in the operation are set forth in the aforesaid patent.

Having thus fully described our invention,

we claim—

1. In a water elevator and carrier, the com-15 bination of the terminal posts, a single strand track secured to said posts, a bracket secured to each post, a support at each bracket having its upper end secured to the track, and having its lower end screw-threaded and passed 20 through the bracket, two nuts upon each support, one above and one below the bracket, and a carrier suspended from said track.

2. In a water elevator and carrier, the combination of the terminal posts, a single-strand |

track secured to one post and passed over a 25 pulley in the other one, a weight attached to the free end of said strand, adjustable supports arising from brackets secured to the terminal posts, intermediate supports, and a carrier suspended from said track.

3. In the within-described carrier, the combination of the clamping levers and a tripping device consisting of an H-shaped frame pivoted by one end of each of its side pieces to one end of the carrier and having the other 35 ends of said side pieces bent inwardly, and means, substantially as described, for operating said tripping mechanism, and for moving said carrier.

In testimony that we claim the foregoing as 40 our own we have hereunto affixed our signatures in presence of two witnesses.

> JESSE S. FORD. PETER RARICK.

Witnesses:

E. C. ERWIN, A. G. SWEENEY.