(No Model.)

J. F. FINE.

WATER CARRIER.

No. 315,267. Patented Apr. 7, 1885.

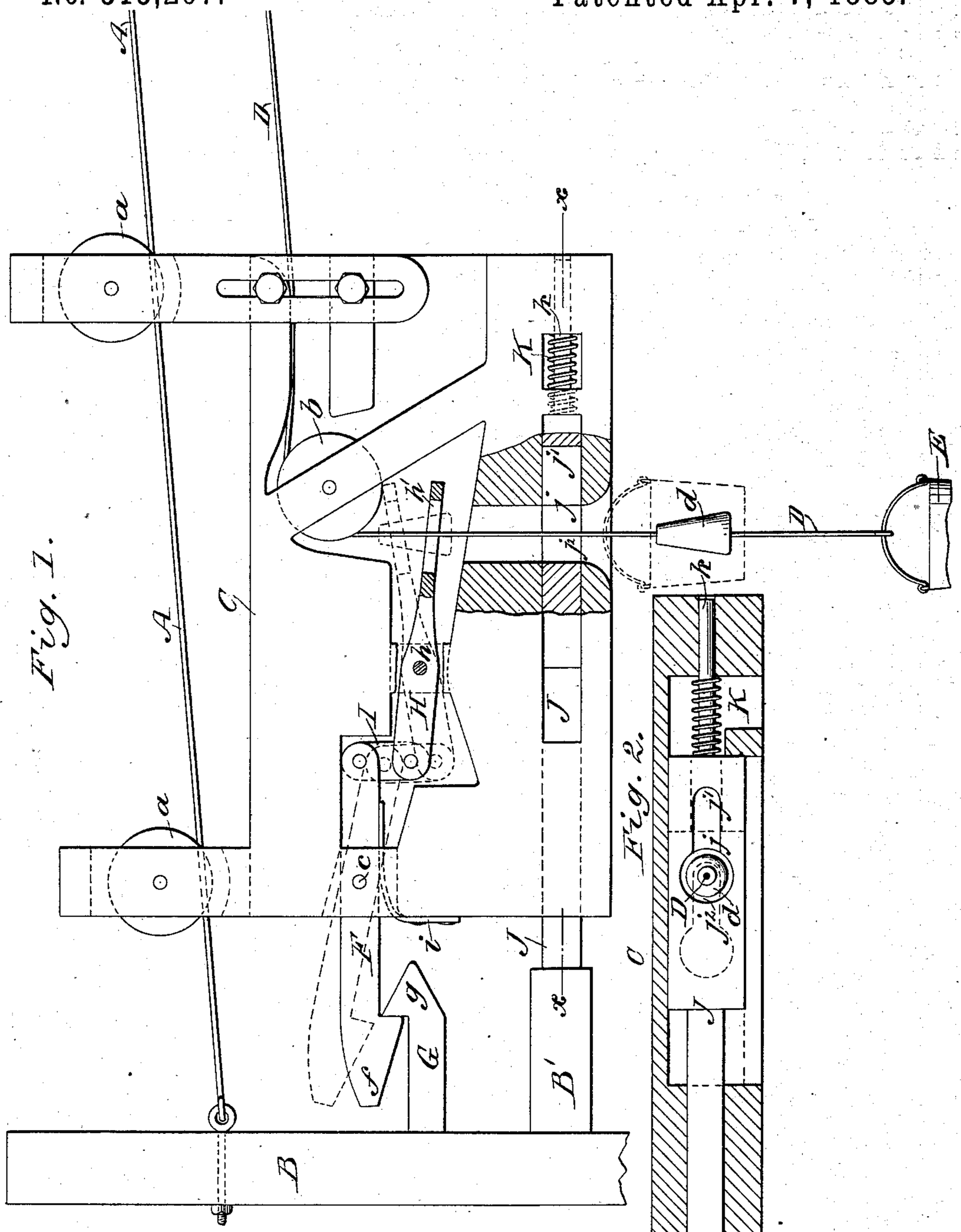

Fig. 1.

Fig. 2.

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UNITED STATES PATENT OFFICE.

JAMES F. FINE, OF LAKE, WASHINGTON TERRITORY.

WATER-CARRIER.

SPECIFICATION forming part of Letters Patent No. 315,267, dated April 7, 1885.

Application filed August 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. FINE, of Lake, in the county of Asotin and Territory of Washington, have invented a new and Improved Water-Carrier, of which the following is a full, clear, and exact description.

This invention relates to a self-acting traveler or carrier adapted to run upon a wire or other tram, whereby people living upon mountains may easily obtain water from the valley below with buckets; and the invention consists of the combinations of parts and their construction, substantially as hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a broken side elevation of my invention, showing the carrier held stationary at the outer end of the tram; and Fig. 2 is a sectional plan view of the carrier, taken on the line *x x* of Fig. 1.

In rough mountainous countries where people live at high elevations and are dependent upon the water that exists in the deep valleys or canyons below is where my invention is most useful. I stretch from mountain to mountain over the valley or canyon containing water the wire tram A, and secure it at its ends to posts B or other firm supports. The tram A is, by preference, held at a slight inclination, so that the carrier C will run out upon the tram from the person drawing the water of its own accord. The carrier C is suspended from the tram A by the grooved pulleys *a a*, and it is provided with the pulley *b*, over which the rope D, to which the water-bucket E is attached, passes.

F is the latch, pivoted at *c* in the carrier C for engaging with the latch G, secured to the post B for holding the carrier C at rest upon the tram A, while the rope D is let out for lowering the bucket E to the water for filling the bucket, and also while the rope D is being drawn in by hand or by a windlass for raising the filled bucket from the water beneath up again to the carrier C. The latch F automatically engages with the latch G, both latches being beveled, as shown at *f g*, for that purpose; and for disengaging the latch F from the latch G, so that the carrier C with the filled bucket E may be drawn back along the tram A by drawing in upon the bucket-rope D, I provide the rope D with the stop *d*, and the carrier with the lever H, which is pivoted at *h*, and connected to the rear end of the latch F by the link I, and is slotted, as shown at *h'*, through which slot the rope D passes, so that the stop *d*, when the rope D is drawn in, will come against the rear end of the lever H and elevate it to the position shown in dotted lines in Fig. 1, which movement of the lever H will depress the rear end and correspondingly elevate the forward or outer end of the latch F, and thus disengage it from the hook G. The stop *d* also serves, in connection with the sliding bar J, for holding the bucket E from dropping, while the carrier C is permitted to run down the tram A. For this latter purpose the bar J is slotted, as shown at *j*, and the rope D passes through the slot, as shown in the drawings, and the rear end, *j'*, of the slot *j* is made of a width less than the diameter of the stop *d*, while the forward end, j^2, is larger than the stop *d*, so that the stop may pass freely up or down through this part of the slot when the bar J is moved to the proper position. The bar J is constantly pressed forward by the coiled spring K, placed upon the spindle *k* of the bar J, so that normally the narrow rear portion, *j'*, of the slot *j* will straddle the rope D in line with and under the stop *d*, so that the stop will rest upon the bar J, and thus hold the bucket E from dropping. The forward end of the bar J reaches out past the forward end of the carrier C, so as to be adapted to strike the post B or the block B', secured thereto, at the time the carrier C reaches the lower end of the tram A, which causes the bar J to be forced backward against the pressure of the spring K sufficient distance to bring the larger portion j^2 of the slot *j* in line with the stop *d*, thus automatically releasing the stop and permitting it, the rope D, and bucket E to descend to the water below for filling the bucket, as will be understood from Fig. 1.

To cause the latch F to act with certainty for engaging with the stationary latch G, I employ the spring *i*, arranged to normally hold the latch F in the position shown in full lines in Fig. 1.

Having thus described my invention, what I

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

1. The carrier traveling upon a tramway, and having its actuating-rope passed over a pulley or support in said carrier and connected to a bucket, said rope having a conical stop affixed to it above the bucket, in combination with the spring-actuated slide having its opening through which said stop passes provided with an extension of less width than the greatest diameter or width of said stop, said slide being acted upon when brought to a state of rest to cause its greater width of opening to come into line with said stop, substantially as and for the purpose set forth.

2. The sliding bar J, pressed forward by the spring K and arranged to reach in front of the carrier C, and slotted, as shown, at $j\,j'\,j^2$, the rope D, stop *d*, and projection B, substantially as and for the purposes set forth.

3. The carrier C, provided with the pulleys *a* and pulley *b*, latch F, lever H, and sliding bar J, in combination with the bucket-rope D, tram A, and stationary latch G, the rope D being provided with the stop *d*, substantially as and for the purposes set forth.

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Witnesses:

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