

J. C. TRULOVE.
WATER CARRIER.
APPLICATION FILED JAN. 14, 1910.

989,449.

Patented Apr. 11, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

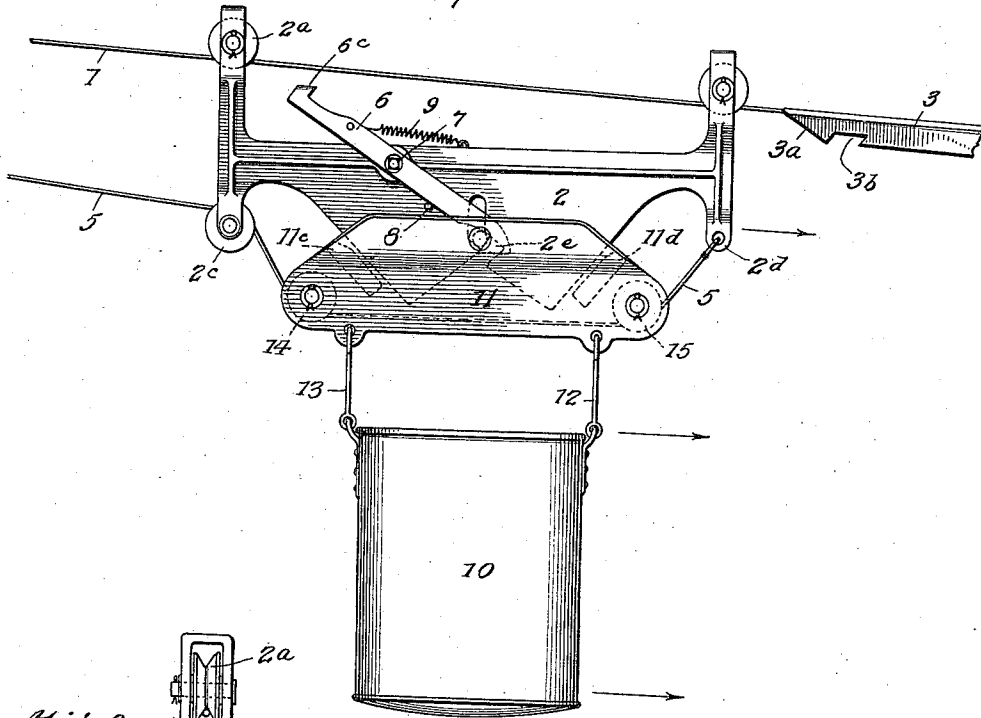


Fig. 3.

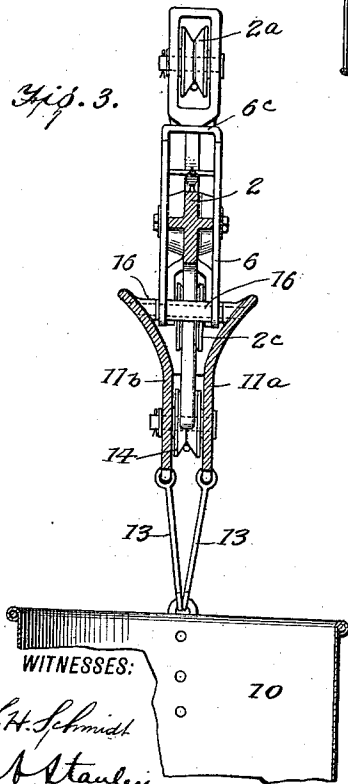


Fig. 4.

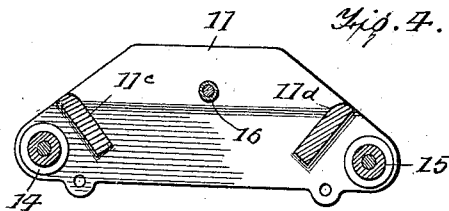
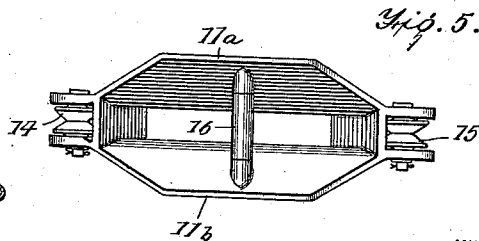


Fig. 5.



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2 SHEETS—SHEET 2.

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UNITED STATES PATENT OFFICE.

JOHN C. TRULOVE, OF SHOALS, NORTH CAROLINA.

WATER-CARRIER.

989,449.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed January 14, 1910. Serial No. 538,042.

To all whom it may concern:

Be it known that I, JOHN C. TRULOVE, a citizen of the United States, and resident of Shoals, in the county of Surry and State of North Carolina, have made certain new and useful Improvements in Water-Carriers, of which the following is a specification.

My invention relates to means for raising and transporting water, and it consists in the combinations, constructions and arrangements herein described and claimed.

The object of my invention is to provide a device which is designed to run on a suspended wire or cable extending from a well, spring or other source of water, to the place where it is to be delivered, which may be manipulated by means of a single cord or cable for raising water, and also for transporting it.

A further object of my invention is to provide a novel form of tripping means by which the bucket may be detached from the carrier and lowered into the well, or when raised, may be attached thereto and transported by the same.

A further object of my invention is to provide simple apparatus for the accomplishment of the above mentioned objects.

Further objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of this specification in which similar reference characters denote like parts in the several views, and in which—

Figure 1 shows a side view of one embodiment of my invention with the bucket attached to the carrier; Fig. 2 shows a similar view with the bucket detached from the carrier, being drawn out of the well toward the carrier; Fig. 3 is a section through the carrier and the guide; Fig. 4 is a central longitudinal section through the guide; Fig. 5 is a plan view of the guide; Fig. 6 is a plan view of the carrier; and Fig. 7 is a perspective view of the spring-actuated trigger.

In carrying out my invention I provide a cable 1 which constitutes a track upon which the carrier 2 runs. The cable 1 extends from the well, spring, stream or other source of water, to the place where the water is to be delivered and is supported by any suitable means.

Referring to Fig. 2 it will be seen that a trip 3 is secured to the wire at a point just above the well 14, or other source of water.

The carrier 2 is provided with the wheels 2^a and 2^b which are arranged to run on the wire 1. It is also provided with the pulley 2^c at one end and with a downwardly projecting arm 2^d at the other, to which the operating cable 5 is attached. The lower part of the carrier consists of a plate having a zig-zag slot 2^e of the shape shown in the figures.

Arranged to straddle the carrier 2 is a trigger 6 of the form shown in Fig. 7. This trigger consists of the two arms 6^a and 6^b joined together by a cross member 6^c. The plate is provided with the notches 6^d at one end, and 6^e at the other end. The trigger is pivoted at 7 and is held normally in engagement with the stop pin 8 on the carrier 2 by means of the spring 9.

The bucket 10 is attached to the guide 11 by means of the links 12 and 13. The guide 11 consists in reality of side plates 11^a and 11^b which are flared outwardly at their upper ends as shown at Fig. 3. At the ends of the guide 11 are the pulleys 14 and 15 while running from side to side is the suspension bar 16. The side plates 11^a and 11^b are joined at their ends by the integral inclined members 11^c and 11^d. The operating cable 5 is attached to the extension 2^d of the carrier, passes underneath the pulleys 15 and 14 of the guide over the pulley 2^c and to the place where the water is to be delivered.

From the foregoing description of the various parts of the device the operation thereof may be readily understood. The wire 1 is inclined, as shown, from the house or other place where the water is to be delivered, to the well. The cable 5 is preferably wound on a windlass (not shown), and as the windlass is unwound the carrier, with the bucket attached as shown in Fig. 1, descends by gravity. When the upper end of the trigger 6 reaches the trip 3 the cross member 6^c on the trigger is cammed downwardly on the cam surface 3^a on the trip. This causes the lower end of the trigger to rise, thereby permitting the sustaining bar 16 of the guide to pass downwardly out of the slot 2^e, as the cable 5 is slacked up. The bucket now descends into the well where it is filled with water. In the meantime the trigger has been retained in position by the

entrance of the ends 6^c in the slot 3^b of the trip 3. Now when the cable 5 is pulled the filled bucket rises vertically. The guide plates 11^a and 11^b pass each side of the depending portion of the carrier and the suspending bar 16 enters the slot 2^a pushing the lower end of the trigger upwardly and disengaging the upper end from the slot 3^b. A further pull on the cable 5 causes a bodily movement of the carrier. It will be noticed that the lower end of the trigger drops downwardly so as to prevent the downward dropping of the bucket again in case there should be any slack on the cable 5. The trigger is maintained in this position by means of the spring 9. The bucket may now be pulled to the place of delivery by winding up the windlass, and may be released from the carrier by pulling downwardly on the operating end of the trigger.

It will be seen that I have provided a water carrier which may be lifted from a well, locked to a carrier and transported bodily to the place of delivery, or may be run to a well and caused to automatically disconnect itself from the carrier and descend into the well to be filled.

I am aware that other forms of the device based upon the same idea might be made, but I consider as my own all such modifications as fairly fall within the spirit and scope of the invention.

I claim:—

1. In a means for raising and transporting water, an inclined track, a carrier movably suspended on said track and provided with a zigzag slot, an operating cable secured to one end of said carrier and arranged to pass through the other end, a guide member adapted to straddle the lower portion of the carrier and being provided with pulleys suspended upon said operating cable between the ends of said carrier, a cross bar carried by said guide adapted to enter the zigzag slot of said carrier, a

spring-actuated trigger provided with a hook at its upper end and with a hook at its lower end adapted to engage the cross bar, and an elongated trip carried by said inclined track, said trip having a cam surface at its upper end and a recess adjacent said cam surface adapted to receive the hook on the upper end of said trigger.

2. In a means for raising and transporting water, an inclined track, a carrier movably suspended on said track and provided with a zig-zag slot, an operating cable secured to one end of said carrier and arranged to pass through the other end, a guide member having side plates flared outwardly at their upper ends and adapted to straddle the lower portion of the carrier and having pulleys suspended upon said operating cable between the ends of said carrier, a cross bar carried by said guide and adapted to enter the zig-zag slot of said carrier, and means for holding said cross bar within said slot.

3. In a means for raising and transporting water, an inclined track, a carrier movably suspended on said track and provided with a zig-zag slot, an operating cable secured to one end of said carrier and arranged to pass through the other end, a guide member having side plates flared outwardly at their upper ends, downwardly and inwardly inclined guide members joining the ends of said plates, said guide members also being provided with pulleys suspended upon said operating cable between the ends of said carrier, a cross bar carried by said guide and adapted to enter the zig-zag slot of said carrier, and means for holding said cross bar within said slot and for releasing it.

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Witnesses:

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