





# UNITED STATES PATENT OFFICE.

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## SUSPENDED CARRIER.

SPECIFICATION forming part of Letters Patent No. 706,521, dated August 12, 1902.

Application filed May 7, 1902. Serial No. 106,312. (No model.)

*To all whom it may concern:*

Be it known that I, REUBEN A. BRUCE, a citizen of the United States, residing at Columbia, in the county of Fluvanna and State of Virginia, have invented certain new and useful Improvements in Suspended Carriers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in suspended carriers, and while the same will be found to be very desirable and useful for a great variety of purposes it will be found especially desirable for use as a water-carrier, as for bringing water from a distant spring or well or other source of supply and delivering it to any desired point; and my invention therefore consists of certain novel features of combination and construction of parts, the preferred form whereof will be hereinafter fully described and claimed, reference being had to the accompanying drawings, which are made a part of this application.

The object of my invention is to provide a reliably efficient carrier of the characters specified, the parts of which may be very cheaply manufactured and readily assembled in their respective operative positions.

A further object of my invention is to provide means for discharging the water from the bucket or other vessel employed to carry it.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, in which—

Figure 1 shows my invention as applied to use, a part thereof being broken away. Fig. 2 is a top plan view of the construction presented in Fig. 1. Fig. 3 is a detail in perspective, showing the means employed for tipping the bucket and discharging it of its contents at any point desired. Fig. 4 is a detail view in elevation, showing the preferred form of bucket-carrier. Fig. 5 is a detail view showing movable bearing or support for one of the pulley-wheels.

In order to conveniently refer to the various details of my invention, numerals will be employed, the same numeral referring to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 designates the carrying-posts, which may be of any preferred character and of any desired number necessary to provide means for suspending the carrying-track 2, which is supported in a recess or between the bifurcated ends of the bracket-arm 3, said bracket-arm being connected to or integrally formed with the bracket proper, 4, which is secured in any preferred way to one of the posts, as by passing the same through the anchoring-bracket 5, which is attached to the post by bolts or screws 6. The anchoring-bracket is bent outward to provide a housing for the inner pulley-wheel 7, thus disposing said wheel snugly between a contiguous part of said bracket and the post 1. The bracket proper, 4, is of sufficient length to pass outward through the anchoring-bracket to provide a bearing for the pulley-wheel 8, also designed to support and carry the controlling-cable 9. The controlling-cable 9 is actuated or driven by the grooved pulley 10, which is rigidly mounted upon a suitable shaft provided with the controlling-handle 11, as clearly shown in Figs. 1 and 2, it being understood that said pulley is properly mounted upon the supporting-post 12 and held in place thereon by the bracket 13. I also provide upon a post contiguous to the post 12 the pulley-wheel 14, and I cross the controlling-cable 9 between the wheels 10 and 14, as shown in Fig. 1, to give a proper direction to and control of the cable 9. At the end of the trackway 2, contiguous to the spring, I provide the buffer-spring 15, designed to rest against the anchoring-post 16, to which said trackway at this point is secured. The anchoring-post 16 is also provided with the preferably horizontally-disposed pulley 17, designed to cooperate with the controlling-cable 9 and return the same in the direction of the wheel 10. The controlling-cable 9 is continuous, excepting for the link or space occupied by the bucket-carrying truck, which in this instance comprises the frame-section 18 and the grooved wheels 19, which latter are designed to engage the trackway 2 and move freely thereon in either direction. The frame connecting said carrying-wheels 19 is also provided with the depending bracket 20, to which the bucket 21 or other receptacle may be



readily connected and from which said bucket may be readily disengaged. The said receptacle 21 is so suspended in position that it will be submerged in the water indicated by the numeral 22 when at that end of the trackway, or said bucket will be engaged by the hook 23 when the receptacle has been brought to the point where it is desirable to discharge its contents into a vessel placed to receive the same, as indicated by the numeral 24 in Figs. 1 and 2. The hook or standard 23 is rigidly connected to the bolster 25, which is provided with a journal 26 at each end, adapted to fit apertures in the supporting-frame 27, and it is obvious that since the free edge of the bolster 25 is concave in form said edge will fit around the contour of the bucket or other receptacle, and since the hook will engage the upper edge of the receptacle the act of further moving the carrying-truck to which the bucket is connected will bring the edge of the receptacle into engagement with the hook and turn the bucket and the bolster and discharge the contents. The relationship of the bucket and said bolster is more fully illustrated in Fig. 3. In Fig. 5 I have illustrated that but one pulley-wheel 28 will be required upon the post second adjacent to the post 12, and in order that said pulley-wheel 28 may be left to play freely up and down, according to the string placed upon the controlling-cable at this point, I mount said wheel 28 upon the movable standard 29, the ends of which are adapted to play loosely in suitable brackets 30, the extreme upper end of the standard 29 being bent at right angles to its supporting-post in order to prevent the standard from moving below the upper bracket, as clearly indicated by the numeral 31.

It will be seen that I have provided simple though reliable and completely operative appliances for bringing water from a distant spring or well and discharging the same where required for use and that the various details thereof may be very cheaply manufactured and disposed in use and while I have described the preferred combination and construction of parts deemed necessary in carrying out my invention I wish to comprehend in this application all substantial equivalents and substitutes as may be considered falling fairly within the scope of my invention.

I desire it to be understood that the car-

rying-wheels 19 may be properly swiveled in their bearings, so that said wheels will be left free to turn upon such pivotal bearings, and thereby readily conform to any curvature or crooked section of the trackway, inasmuch as it will be understood that said trackway may extend over very uneven surfaces, as up and down hills, in crossing valleys, or may turn substantially at right angles and extend off in any desired direction to reach the point where it is desirable to deliver and discharge the water from the spring, and I therefore wish to comprehend such adaptation and construction of parts as will enable the carrying-truck to readily and reliably follow the trackway however said trackway may be built and disposed in its operative position.

Believing that the construction and manner of using my suspended carrier will be made fully apparent from the foregoing specification, considered in connection with the accompanying drawings, further reference to the details thereof is deemed unnecessary.

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

The herein-described suspended carrier comprising a plurality of supporting-posts; a trackway operatively supported on said posts; a plurality of pulley-wheels and a controlling-cable passing over said pulley-wheels and a vessel-carrier forming a link in said controlling-cable and adapted to move upon said trackway, in combination with a suitable buffer-spring located at the terminal of said trackway and a discharging apparatus located at the other end of said trackway and comprising suitable standards and a movable bolster carried by said standards and provided with a hook adapted to engage the bucket or other vessel whereby the bucket will be tilted and disposed upon said bolster and thereby discharged of its contents into a receptacle placed to receive it, all combined substantially as specified and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

REUBEN A. BRUCE.

Witnesses:

W. T. FITZ GERALD,  
C. S. FRYE.