(No Model.)

J. T. LENOIR.

ATTACHMENT FOR WELL CURBS.

No. 401,040. Patented Apr. 9, 1889.

Fig. 1.

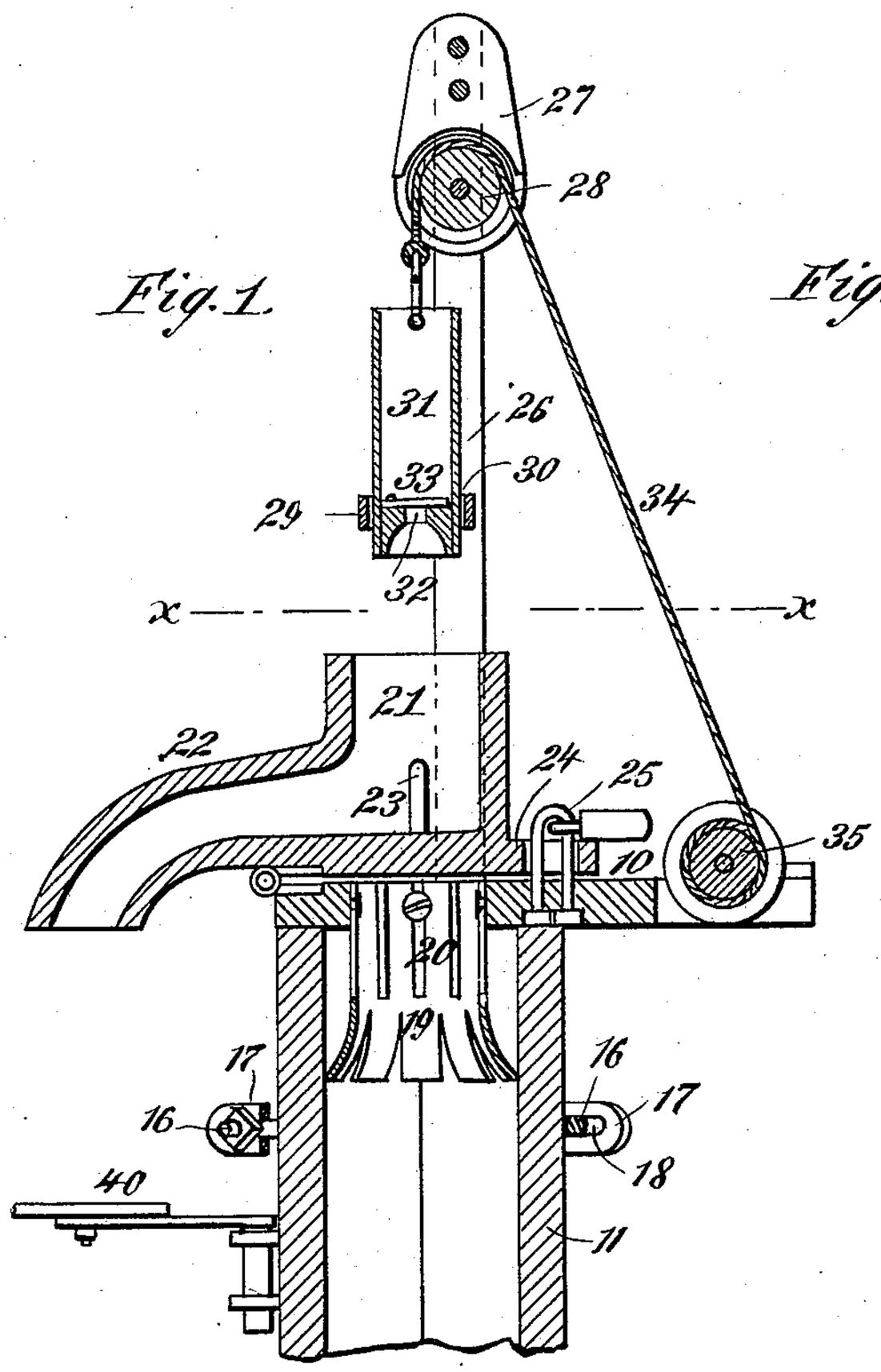


Fig. 2.

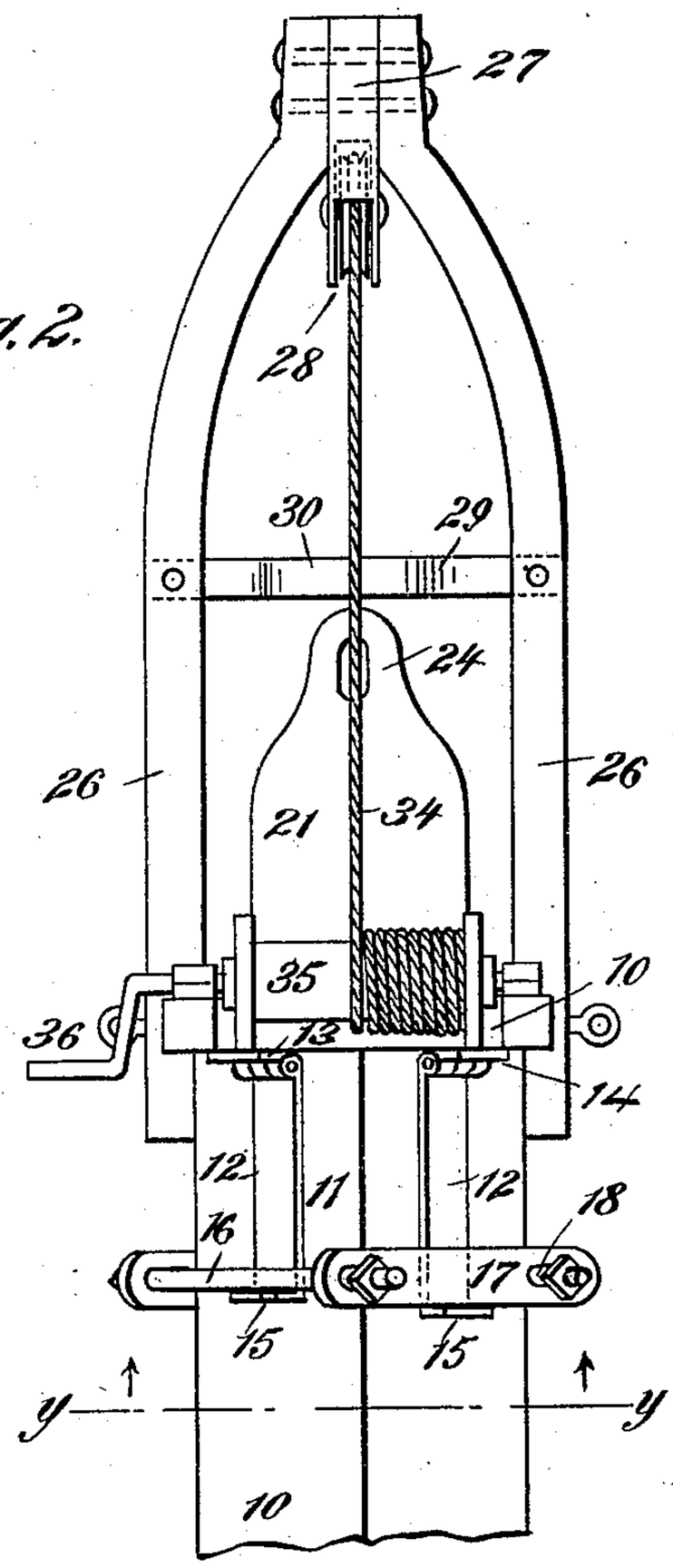


Fig. 3.

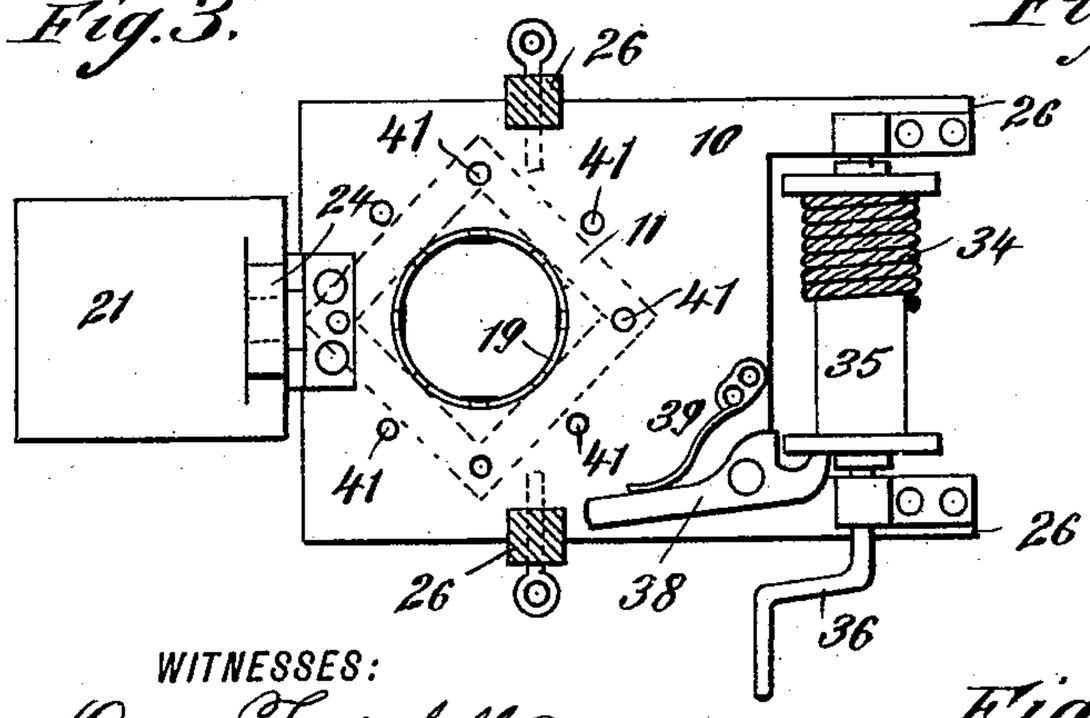


Fig. 4.

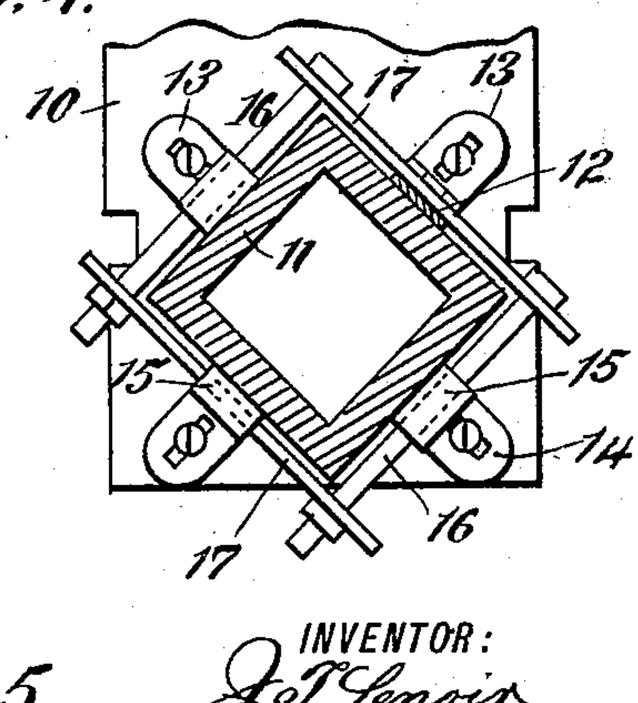
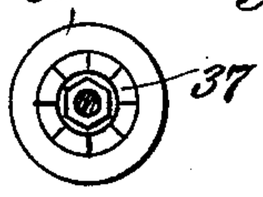


Fig. 5.



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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR WELL-CURBS.

SPECIFICATION forming part of Letters Patent No. 401,040, dated April 9, 1889.

Application filed November 3, 1888. Serial No. 289,900. (No model.)

To all whom it may concern:

Be it known that I, JOHN THOMAS LENOIR, of Columbia, in the county of Marion and State of Mississippi, have invented a new and Improved Attachment for Well-Curbs, of which the following is a full, clear, and exact description.

My invention relates to an attachment for well-curbs, and has for its object to provide a means whereby the delivery of the water is facilitated and rendered more convenient than heretofore.

The object of the invention is also to provide an attachment capable of use in connection with any well-curb whereby the water drawn may be delivered without spilling, and wherein the well bucket and rope need not be handled in drawing water from the well and delivering the same to a pail; and a further object of the invention is to provide means whereby when the well is not in use it may be securely covered and the cover locked in position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a central vertical section through the device attached to a curb, the trunk being in position to deliver the water. Fig. 2 is a side elevation illustrating the trunk as thrown off from the curb-plate. Fig. 3 is a transverse section taken mainly on line *x x* of Fig. 1. Fig. 4 is a similar section taken on line *y y* of Fig. 2, and Fig. 5 is an end view of the drum.

In carrying out the invention a curb-plate, 10, is placed upon the top of the well-curb 11 and securely attached thereto. The manner of attaching the plate to the curb usually consists of a series of hinged straps, 12, one member, 13, whereof is shorter than the other member, 14, and the said member 14 is struck up at the extremity to form a projection, 15, extending at a right angle from the body. The short member 13 of the several straps 12 is secured to the under face of the curb-plate 10, and the longer member, 14, is attached to the curb 11 through the medium of a series of bolts, 16, and transverse plates 17. The plates 17 are located upon opposite sides of the curb and made to bear upon the long member 14 of the straps and rest upon the loop 15 of the same, as best illustrated in Fig. 2. The ends of the plates 17 are provided with elongated slots 18, and the bolts 16 are passed through the said slots and nuts secured upon the said bolts, whereby the plates are made to bear firmly and securely upon the straps 12, and also upon the curb. The object of slotting the plates 17 and hinging the straps 12 is to admit of the ready adjustment of the curb-plate 10 to curbs of various sizes.

The curb-plate 10 immediately over the curb 11 (which is usually rectangular) is provided with a circular opening, and in said opening a guide-cylinder, 19, is secured, adapted to extend down from the upper face of the curb-plate a distance within the curb. The lower end of the guide-cylinder 19 is cut longitudinally and flared outward either in circular form or the said cut extremity is made to engage with the several sides of the curb, as best illustrated in Fig. 1. The upper surface of the guide-cylinder is provided with a series of longitudinal spaced slots, 20, and the said cylinder is attached to the curb-plate by screws passing through four or more of the slots into the walls of the curb-plate opening, as is also illustrated in Fig. 1.

The slots 20 may be dispensed with if the lower end of the guide-cylinder is in the form of a circle, and other means may be employed for attaching the cylinder to the said curb-plate; but when the lower end of the guide-cylinder is bent outward to a contact with the several sides of the curb the slots 20 are indispensable, as the position of the curb-plate upon the curb may have to be changed, in which event it is proper that the guide-cylinder remain stationary within the curb. This end may be accomplished by loosening or withdrawing the screws holding the guide-cylinder to the curb-plate, whereupon the said plate may be shifted as desired and the screws replaced in any of the most convenient slots 20.

Upon one edge of the curb-plate 10 a trunk, 21, is hinged, which trunk is open at the top, closed at the bottom, and provided with a spout, 22. In the bottom of the trunk, at or

about the center of the same, an upwardly-projecting pin, 23, is rigidly secured. The trunk 21 is adapted to be either swung downward parallel with one side of the curb or to be placed in a horizontal position, as shown in Fig. 1. When in the latter position, the well-opening is closed. The trunk is further provided upon the side opposite that having the spout attached with a horizontal projection, 24, apertured to receive a staple, 25, the said staple being secured to the curb-plate. Thus when the well is not in use the trunk may be locked in a horizontal position and closed by any form of padlock passed through the staple.

From opposite sides of the curb-plate 10 arms 26 are carried upward, and between the upper extremities of the said arms a sheath, 27, is secured, in which a curved pulley, 28, is journaled. About midway between the curb-plate 10 and the upper end of the arms 26 a transverse yoke, 29, is secured to said arms, provided with a central opening, 30, of greater diameter than the diameter of the well-bucket 31. The well-bucket 31 is provided with an aperture, 32, in the bottom, which aperture is covered by a valve, 33, adapted to open upward.

A rope, 34, is attached to the bail of the well-bucket and passed over the pulley 28 downward to a connection with a drum, 35, journaled in the side of the curb-plate 10 opposite that upon which the trunk is hinged. The spindle of the drum 35 is carried through the bearings at one end and formed in a crank, 36, whereby the said drum is rotated. One head of the drum, as illustrated in Fig. 5, is provided with a series of ratchet-teeth, 37, and a pawl, 38, is pivoted upon the curb-plate, adapted for engagement with the said ratchet-teeth 37, as illustrated in Fig. 3. The pawl is normally kept in contact with the ratcheted face of the drum by a spring, 39. The pawl 38 acts in a dual capacity: First, when the bucket is being brought upward, the pawl, engaging with the ratchet-teeth 37, prevents the said bucket from dropping down in the well again should the crank 36 be released; secondly, the pawl acts as a brake when the bucket is being lowered, and if the spring is insufficient the pawl may be made to engage with the ratchet-teeth 37, when acting in the capacity of a brake, more firmly by carrying the handle outward.

In operation, if it is desired to draw water from the well and the said well has been locked, the padlock is removed and the trunk 21 carried downward to a perpendicular position, as illustrated in Figs. 2 and 3, uncovering the well-opening. The bucket, which is normally held in an elevated position, as shown in Fig. 1, is then lowered by rotating the drum or windlass 35, and when filled with water, by reversing the movement of the drum, the said bucket is raised. As the bucket is made to approach the top of the curb it is guided upward by the flaring lower end of the guide-cylinder 19. When the bucket has been brought filled to its normal position, the crank 36 of the drum is released and the trunk brought upward to the horizontal position illustrated in Fig. 1. The bucket is now lowered in the trunk, whereupon the pin 23 is brought into engagement with the valve 33 of the bucket, and said valve is opened, permitting the water to flow from the bucket into the trunk and from said trunk through the spout 22 into a pail or other receptacle provided to catch the water, which receptacle may, if desired, be placed upon a shelf or bracket, 40, hinged to the side of the curb beneath the spout.

The binding or connecting straps 12 are hinged at the intersection of the members, in order that when the device is attached to a well-curb out of perpendicular the curb-plate may without difficulty be made to assume a true horizontal position, and the transverse binding-plates 17 constitute a very convenient means of securing the device to a well-curb when the upper portion is to any extent decayed.

The curb-plate may be shifted upon the curb to locate the drum at any side or diagonally the corner by causing the locking-bolt of the upper hinged strap member to be passed through any one of the circularly-arranged apertures 41 in the curb-plate, which apertures are illustrated in Fig. 3. Thus the curb-plate may be shifted as desired without disturbing the position of the lower member of the strap-plates.

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

1. The combination, with the curb-plate 10, having a vertical opening, of the upwardly and forwardly swinging trunk 21, hinged on its lower side to the upper side of the curb-plate, and a fastening in rear of said hinge for securing the trunk to the curb-plate, substantially as set forth.

2. The combination, with a well-curb and an apertured curb-plate attached thereto, of a guide-cylinder secured to the curb-plate, extending downward within the curb, and a trunk provided with a delivery-spout hinged at one side of the said curb-plate, substantially as and for the purpose specified.

3. The combination, with a well-curb and an apertured curb-plate secured thereto and provided with a staple, of a guide-cylinder attached to the curb-plate, extending downward within the curb, and a trunk pivoted upon one side of the curb-plate, provided with a delivery-spout, and having an apertured projection to receive said staple, substantially as set forth.

4. The combination, with a well-curb and a curb-plate, of hinged strap-plates having the upper member adjustably secured to the curb-plate, binding-plates clamping the lower member of the strap-plates, and rods connecting the binding-plates, substantially as shown and described.

5. The combination, with a well-curb and a

curb-plate provided with a well-opening and having a series of apertures arranged around said opening, of hinged strap-plates having the lower member securely attached to the well-curb, and bolts passing through the upper member and through the registering aperture in the curb-plate, substantially as shown and described.

6. The combination, with a well-curb, an apertured curb-plate attached to the same, a guide-cylinder attached to the said curb-plate, extending downward within the curb, and provided with an outwardly-flaring lower end, of a trunk provided with a delivery-spout hinged at one side of the curb-plate, a vertical pin secured within the body of the trunk, a well-bucket provided with a valve in the bottom, and means, substantially as shown and described, for raising and lowering the well-bucket, as and for the purpose specified.

7. The combination, with a well-curb, a curb-plate secured thereto, a guide-cylinder provided with a series of longitudinal slots at the upper end, and an outwardly-flaring lower end, hinged to the curb-plate and extending downward within the curb, of a trunk provided with a delivery-spout hinged at one side of the curb-plate, a vertical pin secured within the body of the trunk, arms extending upward from the curb-plate, a drum pivoted at one side of the curb-plate and provided with a spring-actuated pawl, a pulley located at the upper end of the said arms, a well-bucket provided with a valve in the bottom, and a rope connecting the drum and well-bucket passing over the said pulley, all combined for operation substantially as set forth.

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