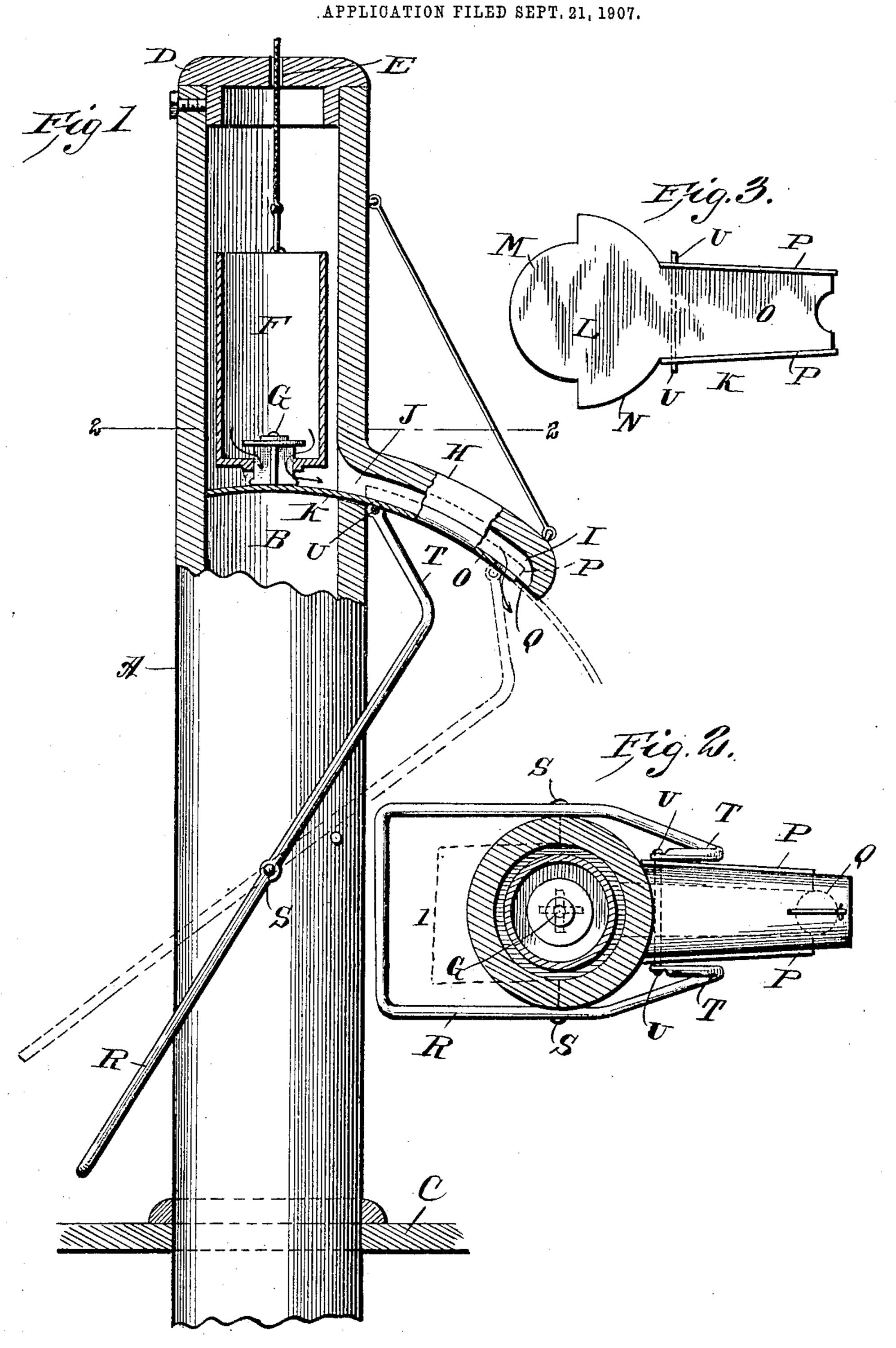
H. R. ANDERSON. WELL BUCKET DUMP.



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HENRY R. ANDERSON, OF GAINESBORO, TENNESSEE.

WELL-BUCKET DUMP.

No. 887,566.

Specification of Letters Patent.

Patented May 12, 1908.

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To all whom it may concern:

Be it known that I, Henry R. Anderson, a citizen of the United States, and resident of Gainesboro, in the county of Jackson and State of Tennessee, have invented certain new and useful Improvements in Well-Bucket Dumps, of which the following is a

specification.

My invention relates to improvements in well-bucket dumps, more definitely stated as means for effecting discharge of water in an elevated bucket, without tipping it, as necessary with common forms of windlass water-elevators, and the object had in view is, the provision of peculiar, novel and improved means of the character stated, comprising means designed to be fastened to the top of a well curbing, or floor at the top of a well, the means being constructed and adapted ed to obviate the necessity of handling the bucket when emptying the water therein into a receiving vessel.

The invention consists broadly stated of a hollow stock or tubing, with its interior providing passage-way for ordinary form of bucket, having a gravity, or other suitable form of downwardly seating discharge valve in its bottom, means whereby to lower the bucket down the well, to be, filled with water, the latter stated means being also adapted for use in elevating the bucket of water and whereby to draw it upward in the hollow stock, and when so elevated, permitting closure of the passage-way through the stock, by adjustment of a novel form of gate or slide-valve forming a part of my invention.

The stock is provided with a discharge spout of novel form, and the gate or slidevalve is adapted, when adjusted to cuttingoff position, to engage and open the valve in the well bucket, when the bucket is lowered to position with its discharge valve contacting the upper side of the sliding gate, or cutoff valve, thus permitting water to flow out of the bucket by gravity, upon the sliding valve, and by which latter the bucket full of water is guided, or caused to flow through the discharge spout on the hollow stock, adapting delivery of the water into a receiving vessel held under the outlet opening of the discharge spout.

My invention further comprehends a peculiar foot operated lever, whereby the cutting-off gate, or slide valve may be adjusted, and the bucket elevating means, comprises a rope, or other suitable device of length

adapted to extend, from the water into the well, upwardly through a small opening in the top-portion of the tubular stock.

Power means of any approved form, such as a windlass, or like device, may be employed for raising and lowering the bucket, though obviously the same may be effected by simple manual manipulation or hand grasping of the outer end of the bucket rope or suspending means.

The invention consists specifically, of substantially the construction and arrangement of parts shown by the accompanying drawing, which construction will hereinafter be 70 fully described and the novel features of my invention be pointed out in the appended

claims.

In the drawing Figure 1 is a view, part in section, and part broken away, in illustration 75 of my invention. Fig. 2 is a transverse sectional view, taken on line 2—2 of Fig. 1; and Fig. 3 is a detail top plan view of the sliding gate, or cut-off device employed in the makeup of my invention.

In the practice of my invention I employ a stock A constructed with an interior passageway B, preferably extending throughout its

longitudinal length.

The stock shown, may obviously be the 85 upper end of a tube extending suitably down into a bored well but it is illustrated by my drawing as extending through a fragmentary portion of a well curbing, or platform C, of any approved and suitable character.

I close the upper end of the passage-way B, through the stock A, with a suitably secured plug, or cap D, having an opening E, extending vertically therethrough, as shown by Fig. 1.

F designates a bucket having a common form of discharge valve G in its bottom, that is, a valve extending through the bucket-bottom, adapted to be engaged and thereby lift it from closing position, common to 100 similarly discharging well-buckets.

My invention is further characterized by the employment of a spout H, on the stock A, the spout being constructed with a groove or passage-way I along its under side, and with said groove or passage-way made communicating with the interior of the stock A, through an opening J. My invention is still further characterized by the use of a sliding gate or cut-off valve K,—see Fig. 3. The valve K 110 has a head portion L with one part of its head M made conforming to the form of the bucket

passage-way B, in the stock A, indicated by the dotted lines 1, in Fig. 2, and an elongated portion N, designed to enter the stock A, through a suitable slot, or opening 5 in the stock just below the spout H.

The sliding gate or cut-off valve K is constructed with an extension O, having side flanges P, the extension being designed to provide a bottom, or under side for the spout

passage-way I, and is constructed and adapted, when the gate or cut-off valve is adjusted inwardly to closing position of the bucket passage-way B, in the stock, to leave an opening Q, whereby water being distanced from the bucket F, may flow along the upper side of the cut-off valve K, through the passage-way I, of the spout H, adapting its delivery into a receiving vessel held under the spout, as will be understood.

For operating the cut-off valve K, I provide a V-shaped foot-lever R having pivotal support at S, on opposite sides of the stock A, the lever ends T, being made extending upwardly and provided with pivotal attachments to the cut-off valve K, at V, as clearly

shown by my drawing.

In the use of my invention, the cut-off K is adjusted to position indicated by dotted lines in Fig. 1 thereby opening up the passage-way B in the stock A. Now with the bucket support, or cut-off valve K adjusted as stated it is apparent that the bucket F is free to drop down into the well, and be filled with water.

While the cut-off valve is held at the dotted adjusted position shown, by operation of the foot-lever R, the bucket F is drawn upwardly in the stock A to position above the alve K, and when the bucket is so elevated

the cut-off valve K is adjusted by means of the foot-lever, to position indicated by full lines, in Fig. 1, obviously when the bucket is lowered to position resting upon the cut-off valve, as shown by Fig. 1, its valve G will be

- opened by contact thereof with the cut-off valve, thereby permitting water in the bucket to flow therefrom as indicated by the arrows, and the passage-way down the stock being closed obviously the discharged water will
- 50 flow along upon the cut-off valve, to and through the spout H to the spout's delivery opening Q, adapted to be received in any vessel held under the spout.

I claim:

of a hollow stock having a discharge spout, a bucket adapted to be raised and lowered through the stock, the bucket being con-

structed with a projecting valve in its bottom, a cut-off valve, and a foot lever, the cut- 60 off valve being adapted to be adjusted into the stock, cutting off passage therethrough, and the foot lever being arranged with pivotal support on the stock, said support being located below the spout, and constructed 65 to allow the cut-off valve to be adjusted thereby.

2. In combination, a hollow stock, a spout on the stock, a bucket adapted to be raised and lowered in the stock, means for discharg- 70 ing water from the bucket, a cut-off valve having sliding adjustment into the stock, the cut-off valve being adapted to close the bucket passageway through the stock, and a foot-lever having pivotal support on the 75 stock, said support being located below the spout, the lever arranged with one end extending down near the ground, and its other end connected with said cut-off valve adapted for operating said valve, substantially as 80 described.

3. In combination, a hollow stock, a spout on the stock, the spout being constructed with an open passageway along its under side and with said passageway made leading 85 into the interior of the stock, a cut-off valve having sliding adjustment into the stock adapted to close passageway therethrough, the cut-off valve being constructed forming a bottom closure for the spout passageway, a 90 foot-lever having pivotal support on the stock, said support being located below the spout, and the lever being arranged with one end projecting downward toward the ground, and with its other end connected to said cut- 95 off valve, adapting the latter to be adjusted by foot-manipulation, and a bucket with suspending means.

4. In combination, a hollow stock, a bucket and means whereby to raise and lower it in 100 the stock, a projecting valve in the bottom of the bucket, a spout on the stock, the spout being constructed with an open passage-way longitudinally along its under side and made leading into the interior of the stock, a cut- 105 off valve adapted to be adjusted into the stock, closing passage-way therethrough, the cut-off valve being constructed providing a bottom closure for said passage-way on the spout, and a foot-lever whereby to operate 110

the cut-off valve.

HENRY R. ANDERSON.

Witnesses:

M. J. Dixon, H. J. Lynch.