

C. B. FLEET.
WELL BUCKET.

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984,656.

Patented Feb. 21, 1911.

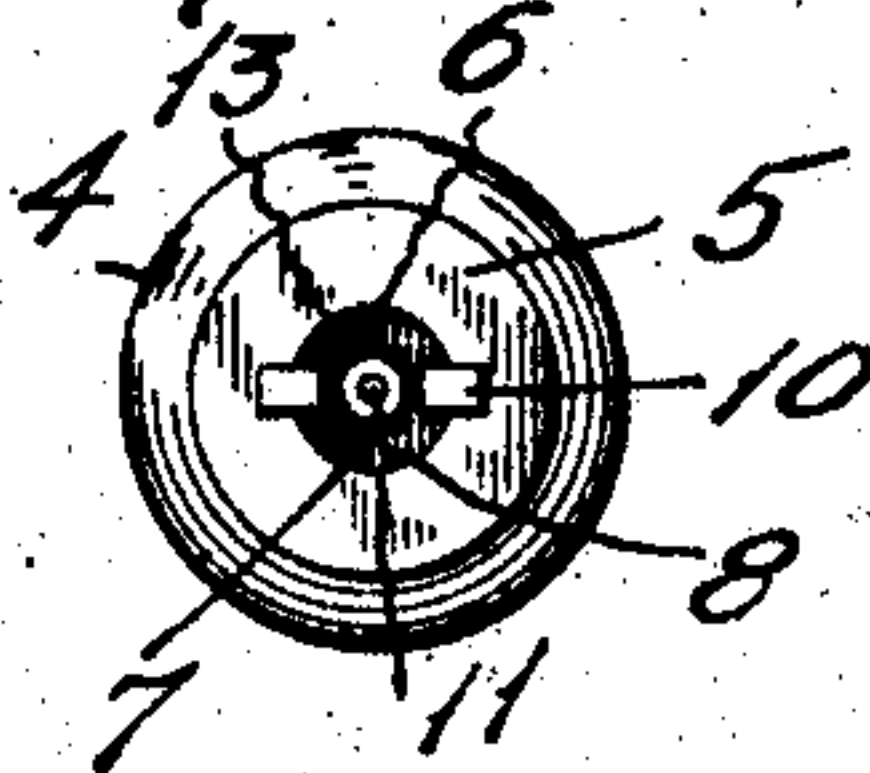
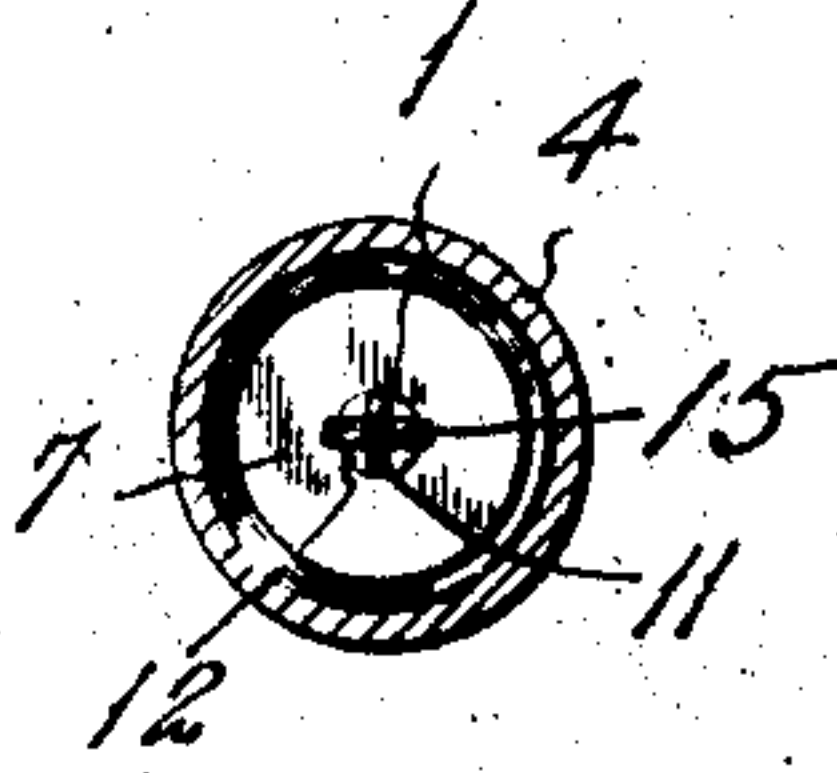
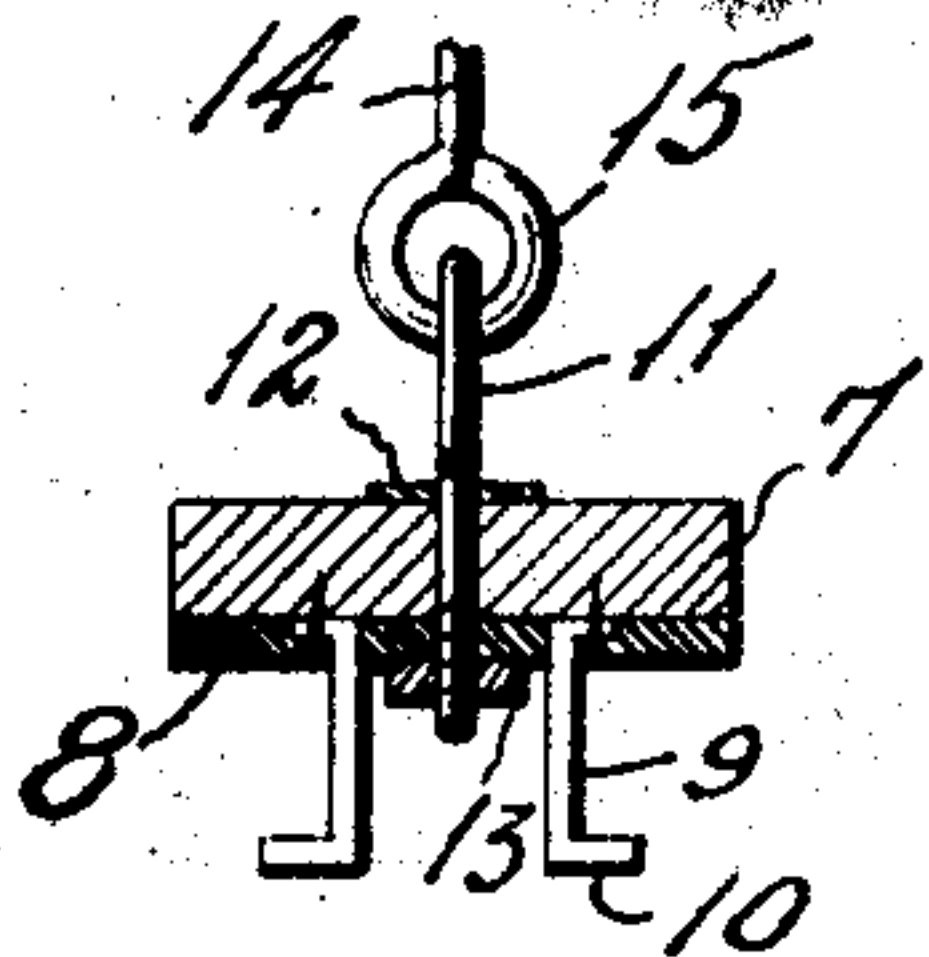
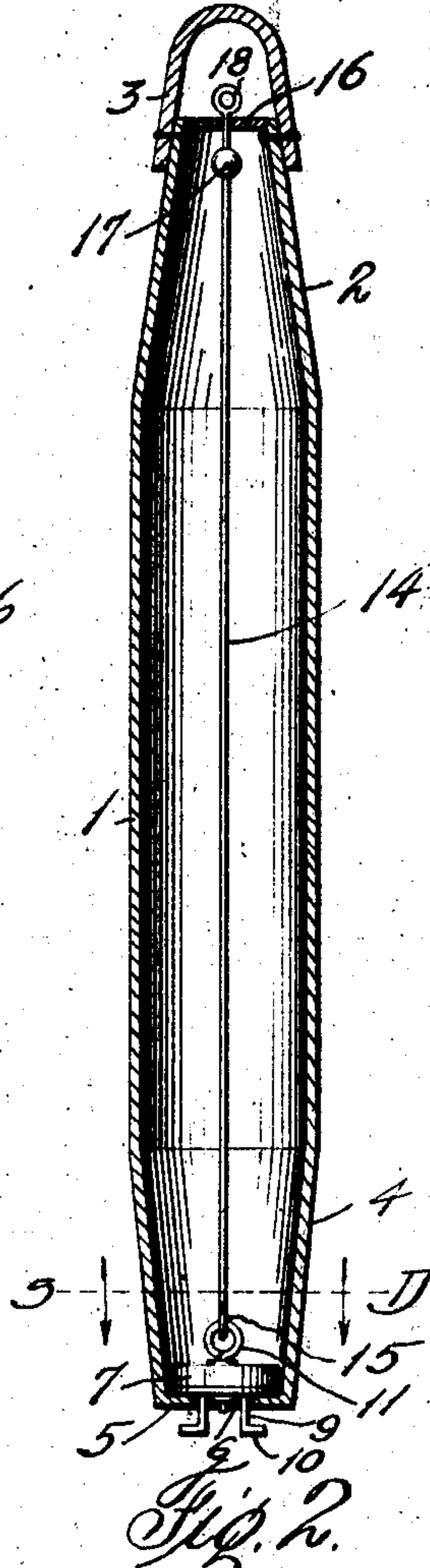
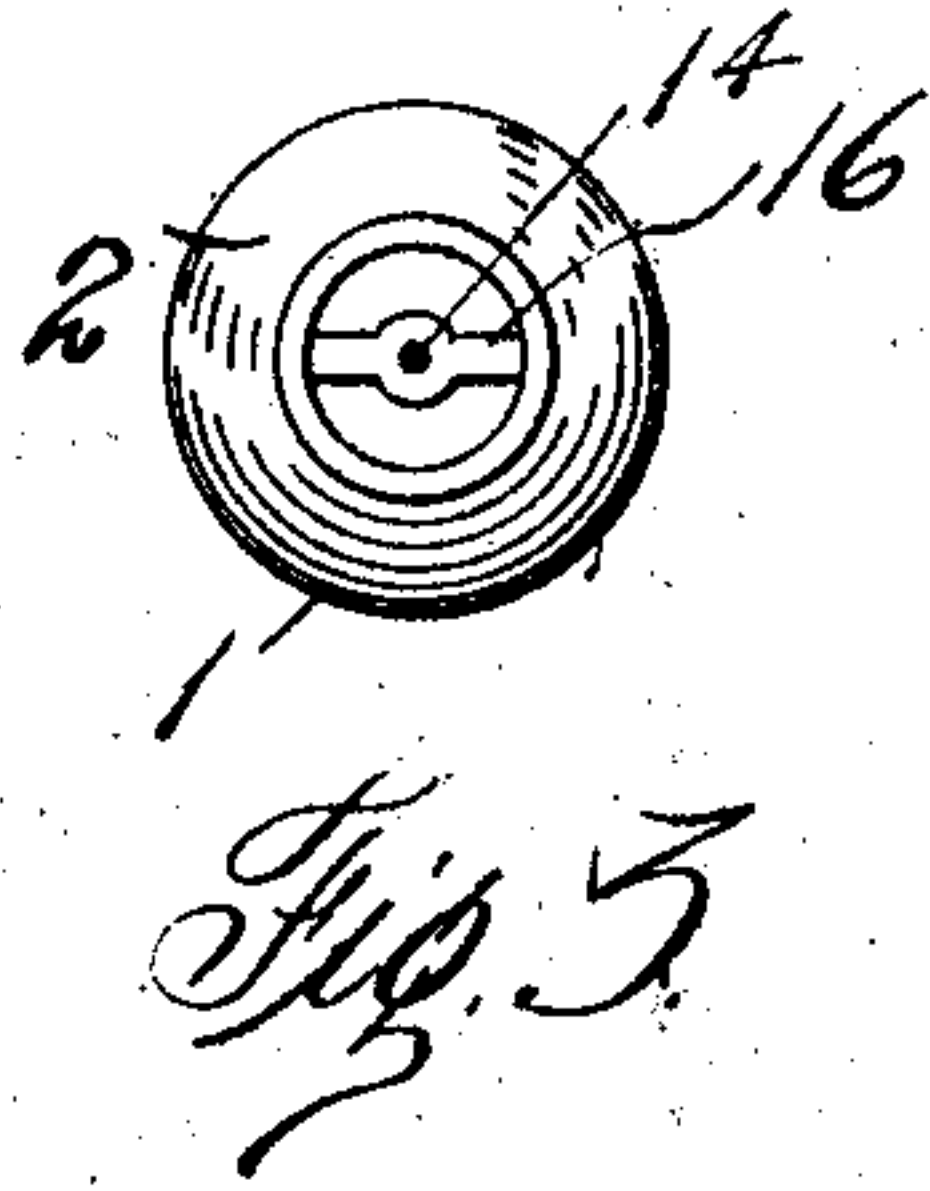
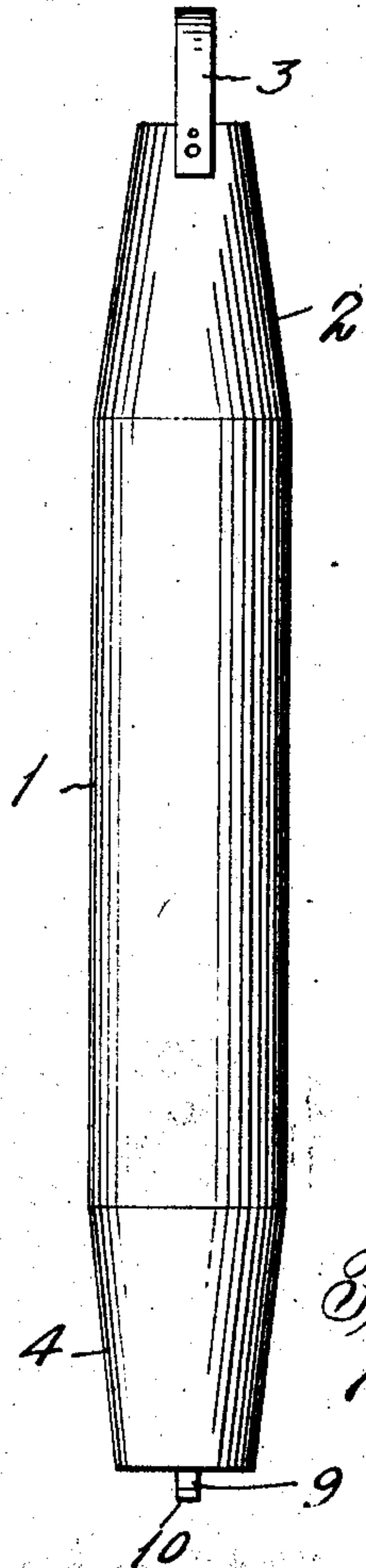


Fig. 4

Fig. 5

Fig. 6

WITNESSES:

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WELL-BUCKET.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES B. FLEET, citizen of the United States, residing at Quinlan, in the county of Hunt and State of Texas, have invented certain new and useful Improvements in Well-Buckets, of which the following is a specification.

This invention relates to improvements in well buckets.

10 The object of the invention is to provide a bucket such as are used in bored wells, and equip said bucket with a particular form of valve mechanism.

15 A further object resides in the particular shape of the bucket.

Finally the object of the invention is to provide means of the character described that will be strong, durable, efficient, and easy of operation, simple and comparatively 20 inexpensive to construct, and also in which the several parts will not be likely to get out of working order.

With the above and other objects in view, the invention has relation to certain novel 25 features of construction and operation, an example of which is described in this specification and illustrated in the accompanying drawings, wherein:

30 Figure 1. is an elevation of the improved bucket, Fig. 2. is a longitudinal section of the same with the valve mechanism in elevation, Fig. 3. is a plan view, the bail being omitted, Fig. 4. is a vertical section of the valve, Fig. 5. is a cross sectional view taken 35 on the line S—D of Fig. 2, and Fig. 6. is an underside view of the bucket.

In the drawings the numeral 1 designates an elongated cylindrical bucket formed of suitable metal. At its upper end the bucket 40 has its walls converged as indicated at 2. A bail 3 is secured to the upper end of the bucket and on the outside thereof. It is obvious that the body portion of the bucket fits comparatively close in the casing of the 45 well and if the tapered portion 2 was not provided the bail could not be attached to the outside of the bucket. The bucket also has a converged or tapered lower end 4 closed by a bottom 5, which latter however has a 50 central opening 6. By reason of the tapered end 4 the bucket may be more readily inserted in the well casing and the taper is sufficiently long and the bottom of such diameter as to protect the valve in inserting 55 the bucket in the well casing. The bottom 5

is preferably made integral with the body of the bucket and is flat.

Within the bucket a disk valve 7 is arranged. This valve has such a diameter as to rest on the bottom 5 but to have only a 60 limited play thereon. On the underside of the valve a layer 8 of yieldable material such as leather or rubber, is secured, and this layer contacts with the bottom 5. Opposed vertical legs 9 are secured to the disk 65 7 and extend through the opening 6 of the bottom. Outwardly directed feet 10 extend at substantially right angles from the lower ends of the legs.

The outwardly directed feet limit the upward movement of the valve by engaging 70 with the bottom 5. It is obvious that when the bucket is lowered and the feet 10 brought into contact with any fixed surface the valve will be raised in the bucket and by reason 75 of the converged walls of the portion 4, the contents of the bucket will pass out through the opening 6, or if the bucket is submerged water will pass in through the opening 6 and fill the bucket. In the latter case when 80 the bucket is raised the valve will seat on the bottom and be held in place by the contents of the bucket.

An eye bolt 11 is passed through the valve 7 and secured in position by a washer 12 85 and a nut 13, the eye of the bolt projecting above the valve. This eye is engaged with the eye 15 on the lower end of a vertical rod 14 passing centrally up through the bucket. Across the upper open end of the 90 bucket a brace 16 as is shown in Figs. 2 and 3 is secured. This brace is secured to the inside of the bucket, but may be attached by the same fastenings that hold the bail 3. The rod 14 passes through the brace and 95 has a ring 18 above the same. Below the brace a ball 17 is fixed on the rod 14 as is shown in Fig. 2.

By means of the rod 14 the valve may be raised or unseated without bringing the feet 100 10 of the legs 9 into contact with some surface and the ball 17 will limit the upward movement of the rod and obviate bending of the feet 10 if the same should be forcibly brought into contact with the bottom of the 105 bucket. The advantage of the rod 14 will be apparent in instances where it is desirable to discharge the contents of the bucket into a vessel or receptacle and one does not wish to submerge the bucket in the vessel or re- 110

ceptacle. The engagement of the eye bolt 11 and the eye 15 provides a free joint whereby the proper seating of the valve is not impaired.

5 What I claim is:

10 In a well bucket, an elongated cylindrical body having its ends converged, the entire outer surface of the body being smooth, a bottom formed integral with one of the converged ends and having a central opening, a disk valve mounted in the lower converged end of the bucket and adapted to rest on the bottom thereof, legs attached to the valve and extending through the opening of the bottom, opposed outwardly directed feet extending from the lower ends of the legs and adapted to engage the bottom of the bucket to limit the upward move-

ment of the valve, an eye bolt passing through the valve, a brace across the upper end of the bucket, a central rod passing through the brace having a ring above the brace and an eye at its lower end engaging the eye bolt, a guard on the rod below the brace adapted to engage the latter to limit the upward movement of the valve, and a bail having its lower end secured on the outside of the upper converged end of the bucket.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES B. FLEET.

Witnesses:

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