

(No Model.)

C. H. FOSTER.
WELL BUCKET BOTTOM.

No. 348,960.

Patented Sept. 14, 1886.

Fig. 1.

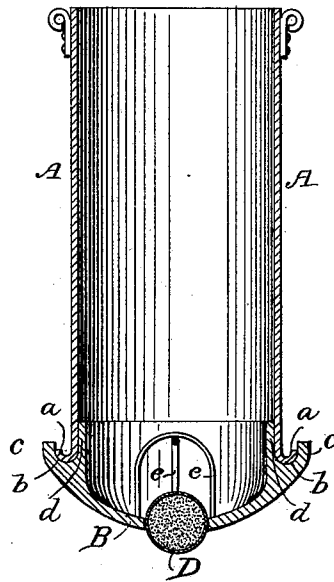
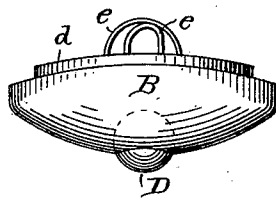


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES H. FOSTER, OF OMAHA, NEBRASKA.

WELL-BUCKET BOTTOM.

SPECIFICATION forming part of Letters Patent No. 348,960, dated September 14, 1886.

Application filed March 18, 1886. Serial No. 195,695. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. FOSTER, a citizen of the United States, residing at Omaha, in the county of Douglass and State of Nebraska, have invented certain new and useful Improvements in Well-Bucket Bottoms; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention has relation to improvements in metal buckets; and it consists in the peculiar construction and adaptation of the bottom, and also in a valve and guard for the same.

It also consists in the peculiar construction and novel combination of certain parts, as will be hereinafter more fully set forth and claimed.

In the accompanying drawings, Figure 1 is a central vertical sectional view of a bucket constructed according to my invention, and showing the valve in position therein; and Fig. 2 is a perspective view of the bottom detached with the valve and guard also in position.

Referring by letter to the said drawings, A indicates the body of the bucket, which may be formed of sheet metal in the ordinary manner. This body portion is provided at its lower edge with an external upturned annular flange, *a*.

B indicates the bottom, which is of cast metal, and is concave on its inner side and convex on its outer side. This bottom is provided on its upper or inner side, and at or adjacent to its edge, with an annular channel, *b*, adapted to receive the lower flanged edge of the body A. The outer wall, *c*, of the channel *b* should be of slightly greater height than the flange *a* of the body, so as to provide a means for receiving the solder in uniting the bottom and body. When the bottom is thus constructed, the flanged edge of the body is placed in the channel thereof, and solder or other suitable material is placed

in the said channel and flange of the body, where a firm joint may be effected. It will be seen that the inner wall, *d*, of the channel *b* will serve as a brace to the body at the joint, and effectually serve in preventing lateral strain upon the said joint. The bottom is provided with a central annular aperture for the discharge of its contents, and the said opening is normally closed by a ball-valve, D. This valve is preferably formed hollow, of rubber, and is filled with sand or the like for weighting the same. The bottom being concave, as described, the water will be allowed a free and unobstructed flow when the said ball is raised from its seat. Arranged around the discharge-aperture of the bottom is a cage for the ball. This cage is composed of the wires *e e*, which are secured at their opposite ends to the bottom, and carried a sufficient distance above the said aperture to permit the ball to be lifted from its seat and the contents to flow.

This bucket is more especially adapted for use in windlass water-elevators, or is more commonly known as "well-buckets." The ball being weighted, as set forth, it will, in its normal position, close the opening in the bottom of the bucket; but when the bucket has been raised from a well and the bottom placed on some means of support the protruding portion of the ball will be engaged, and by the weight of the bucket and its contents the valve will be opened and the water allowed to freely flow therefrom.

Having described this invention, what I claim is—

The combination, with the sheet-metal body having its lower edge provided with the annular upturned flange, of the cast-metal bottom having the annular channel to receive the said flanged edge of the body, the outer wall of the channel being higher than that of the body flange, and the whole united by solder, substantially as specified.

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

CHAS. H. FOSTER.

Witnesses:

J. C. BURKLEY,
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