C. L. BARTLETT.

BUCKET FOR TRANSPORTING PLASTIC MATERIAL.

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1,005,138. **Patented Oct. 10, 1911.**

Fig. 1.

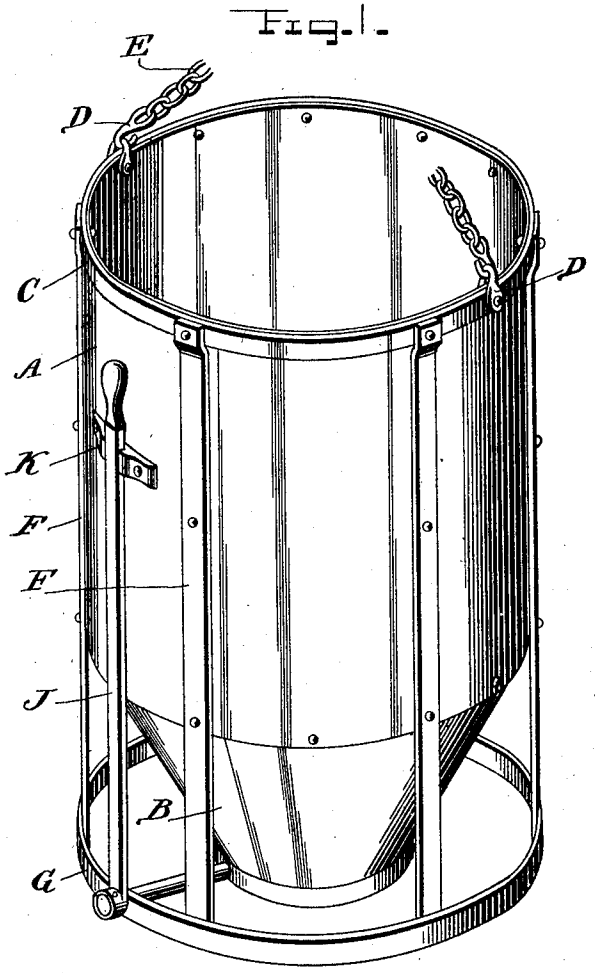
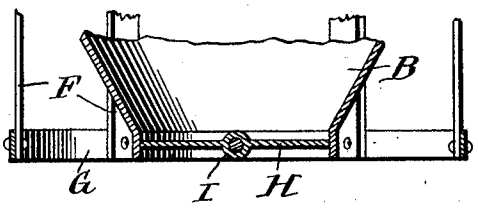


Fig. 2.



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UNITED STATES PATENT OFFICE.

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BUCKET FOR TRANSPORTING PLASTIC MATERIAL.

1,005,138. Specification of Letters Patent. **Patented Oct. 10, 1911.**

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To all whom it may concern:

Be it known that I, CHARLES L. BARTLETT, citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Buckets for Transporting Plastic Material, of which the following is a specification.

This invention relates to buckets used for the transportation of concrete and the like in structural work; and the object of the invention is to provide a bucket in which heavy masses of concrete may be handled, and the discharge thereof from the bottom of the bucket may be regulated or stopped at will.

The nature of the invention is fully disclosed in the description and claim following, reference being had to the accompanying drawings, in which:—

Figure 1 is a view of a bucket embodying my invention, as seen in perspective. Fig. 2 is a diametrical section of the lower end of the same.

In the handling of concrete for structural work it is common to use a large iron receptacle, commonly called a bucket, having a suitable bail by which it is suspended from a crane, and a hinged bottom adapted to be opened to discharge the contents. In many cases, however, it is very desirable to be able to regulate the flow of material, or stop it altogether, and this is impossible in the case of the concrete bucket in general use.

Referring now to the drawings, A designates the cylindrical body of my improved bucket, having a hopper shaped lower portion B. The whole bucket is preferably of strong sheet steel, and reinforced by a top-ring C riveted thereto. To this ring are attached suitable stirrups D to take the suspending chain E. To the sides of the cylinder are riveted at intervals a number of vertical bars F, and to the lower ends of these bars is riveted a ring G, which serves as a supporting base for the bucket when it stands alone and also as a convenient handle for the bucket. In the opening at the bottom of the bucket is placed a bottom-plate or gate H, which in practice is secured to a pivot rod I passing through or near the center of the gate and suitably secured thereto. This pivot rod is journaled in the adjacent sides of the bucket bottom, and one end is extended to pass through a hole in the base ring, as shown in Fig. 1. To this extension of the pivot is secured a hand-lever J, normally extending up along the side of the bucket. Near its upper end the hand-lever engages a notched block K riveted to the side of the bucket. The lever is disengaged by drawing it side-wise, when it may be turned in either direction. The sides of the block adjacent to the notch are preferably inclined, so that the lever latches itself by merely swinging it to position.

In practical use the bucket is conveniently placed on the ground under the discharge nozzle of the concrete mixer (not shown), and receives its load of semi-liquid material. It is then swung to the place where the concrete is to be used when the operator, by means of the handle-lever, opens the gate at the bottom as much or little as circumstances may require. His control of the flow of material is absolute and easy, notwithstanding the great weight thereof, because the gate, being pivoted at the center, is balanced, or so nearly so that the operator holds the lever at any point with little effort.

It will be gathered from the foregoing that the open bottom of contracted area due to the tapered lower portion of the bucket, and the centrally-pivoted gate enable the operator to nicely and easily control the discharge of the plastic contents notwithstanding the tremendous weight thereof.

Having thus described my invention, what I claim is:

1. The combination with a bucket open at its bottom, of a gate pivotally secured within the lower end of the bucket, a lever attached at one end to the pivot of said gate, and means secured to the side of the bucket for locking the upper end of the lever.

2. The combination with a bucket open at its bottom, of a gate pivotally secured within the lower end of the bucket, a lever attached at one end to the pivot of said gate, and means secured to the side of the bucket for locking the upper end of the lever, comprising a notched block.

3. The combination with a bucket open at its bottom, of a gate located within the lower end thereof and having a bore extending throughout its central portion, a shaft journaled in the lower end of the bucket and extending through the bore of said gate and also outside of the bucket, a lever attached at one end to the shaft, and means secured to the side of the bucket for locking the upper end of the lever.

4. The combination with a bucket open

at its bottom, of a gate located within the lower end thereof, and having a bore extending throughout its central portion, a shaft journaled in the lower end of the bucket and extending through the bore of said gate and also outside of the bucket, a lever attached at one end to the shaft, and means secured to the side of the bucket for locking the upper end of the lever, comprising a notched block.

5. A concrete bucket having cylindrical sides terminating in a hopper-like lower open end, a skelton frame therefor composed of arms secured to the sides of the bucket, a supporting ring attached to the lower ends of said arms to form a base and an unobstructed hand-hold, a gate pivoted in the lower open end of the hopper, a lever attached at one end to the pivot of said gate, and means secured to the side of the bucket for locking the upper end of the lever.

6. The combination with a bucket open at its bottom, of a gate pivotally secured within the lower end of the bucket, a skeleton frame secured to the bucket having a support surrounding the bottom thereof, a lever attached at one end to the pivot of said gate on the outside of the support, and means secured to the side of the bucket for locking the upper end of the lever.

7. The combination with a bucket open at its bottom, of a gate pivotally secured within the lower end of the bucket, a skeleton frame secured to the bucket having a support surrounding the bottom thereof, a lever attached at one end to the pivot of said gate on the outside of the support, and means secured to the side of the bucket for locking the upper end of the lever, comprising a notched block.

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

CHARLES L. BARTLETT.

Witnesses:
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