W. G. AVERY.
Elevator-Bucket.

No. 221,207. Patented Nov. 4, 1879.

Fig. 1.

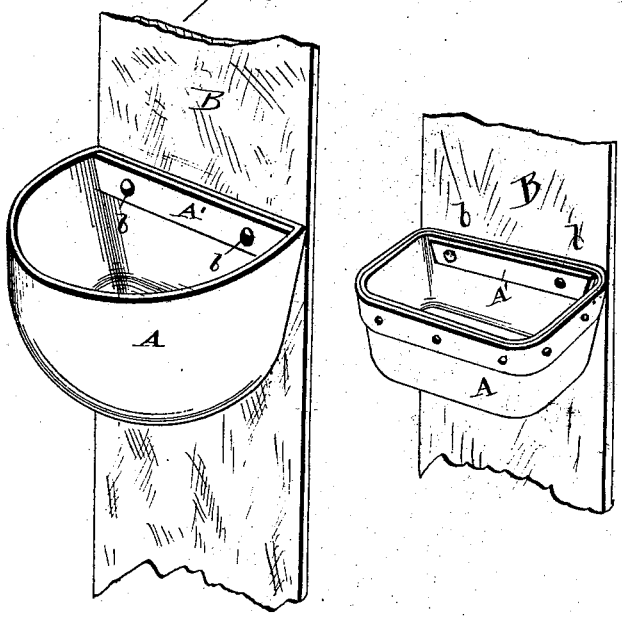


Fig. 2

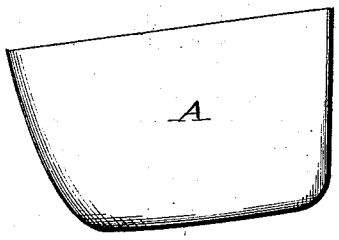


Fig. 3.

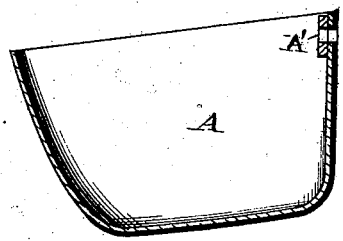
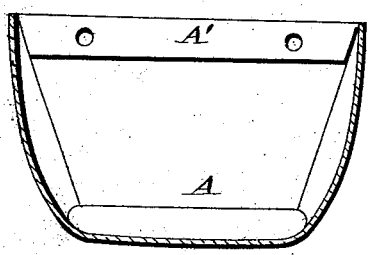


Fig. 4.



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WILLIAM G. AVERY, OF DETROIT, MICHIGAN.

IMPROVEMENT IN ELEVATOR-BUCKETS.

Specification forming part of Letters Patent No. **221,207**, dated November 4, 1879; application filed September 22, 1879.

To all whom it may concern:

Be it known that I, WILLIAM G. AVERY, of Detroit, county of Wayne and State of Michigan, have invented a new and Improved Elevator-Bucket; and I do hereby declare the following to be such a full, clear, and exact description thereof as will enable others skilled in the art to which my invention pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in an elevator-bucket made without joint by striking it up from a single piece of sheet metal by hand or between suitable dies, and formed with a flat bottom, curved sides and front, and a flat back, whereby it is adapted to be firmly secured to the carrying-belt, is of great strength, durability, and carrying capacity.

In the drawings, Figure 1 represents, in perspective, one of my elevator-buckets attached to a belt. Fig. 2 is a side view of the same. Fig. 3 is a cross-section from front to rear. Fig. 4 is a cross-section from side to side.

A represents my improved elevator bucket. It is formed with its back inclined, so that when its back rests against the face of the belt the forward edge of the bucket will drop below the rear edge, which construction facilitates the discharge of its contents, and also gives free access to the rivets by which it is attached to the belt.

The ends of the bucket may be vertical or may be inclined from the top inward toward the bottom. The corners at the front and rear may be made angular or may be rounded, as represented in the drawings. I prefer to make them rounded, as less liable to fill up with flour or other substance that is being elevated, and as more readily cleaned.

The front of the elevator-bucket may be vertical, or nearly so; but I prefer to incline it inwardly from top to bottom, such construction greatly facilitating the discharge from the bucket.

This elevator-bucket I form from a sheet of plate metal—as, for instance, tin, sheet-iron, brass, or copper. I strike it up between suitable dies, or it may be struck up or hammered out by hand until it has assumed the shape of the completed bucket without seams, joints, or rivets. If dies are employed, there may be one or more used in the process of forming a bucket. In other words, the bucket may be formed either by gradual operation of successive dies or at a single operation by a suitable counter and intaglio die.

If desired, the rear upper edge of the bucket may be re-enforced with an additional thickness of metal, by either turning the metal at this point upon itself or applying another piece either to the inside or the outside of the bucket. So, also, a similar re-enforcing may be placed around the outside of the upper edge of the entire bucket or of the front edge alone, for the purpose of sustaining the same and receiving the wear. So, also, where the elevators are made from thick or plate metal, the effect of re-enforcing may be accomplished by so striking up the metal as to leave it thicker about its upper edges.

In the drawings, A′ represents the re-enforcement. B is a belt. *b* are rivets or other means of fastening to the belt.

My improved elevator-bucket is formed with a flat bottom, curved sides, and flat back, whereby it is insured great strength, durability, and carrying capacity.

What I claim is—

An elevator-bucket struck up from a single piece of metal and formed with a flat bottom, curved front and sides, and flat back, substantially as set forth.

Witness my hand at Detroit, Michigan, this 13th day of September, A. D. 1879.

WILLIAM G. AVERY.

Witnesses:
CHARLES M. WOODRUFF,
W. M. PORTER.