F. H. C. MEY.
Hoisting-Bucket.

No. 212,317. Patented Feb. 18, 1879.

FIG. 1.

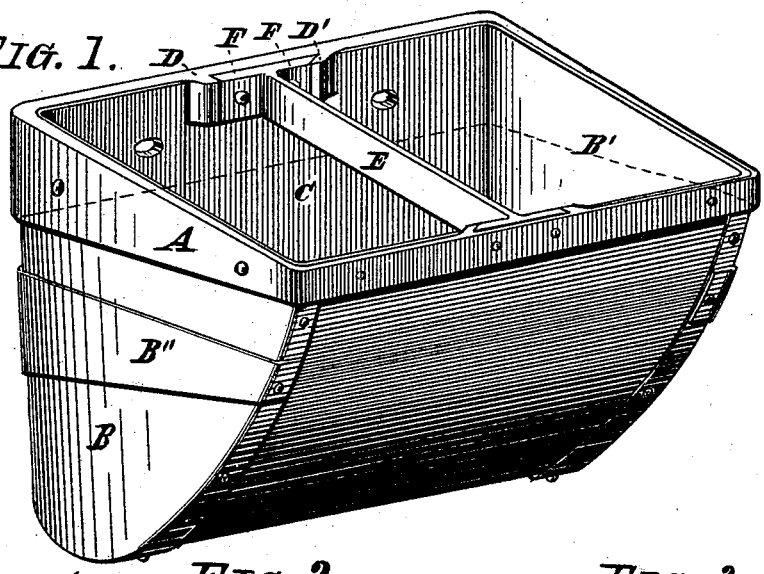


FIG. 2.

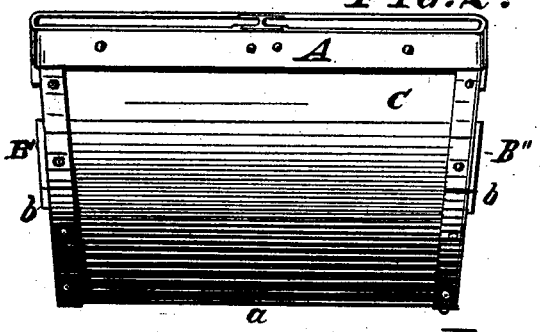


FIG. 3.

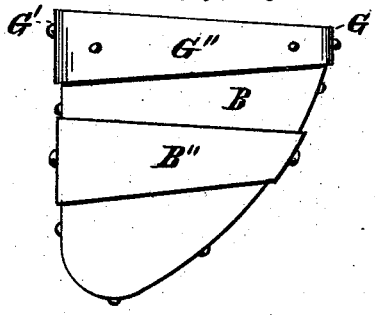
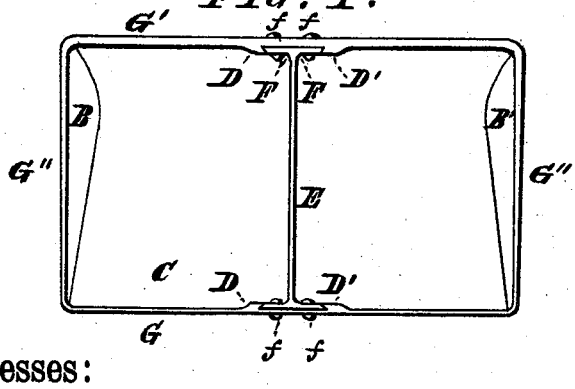


FIG. 4.



Witnesses:
Michael J. Stark
A. Stark

Inventor:
Fred. H. C. Mey.
by Michael J. Stark,
Attorney.

UNITED STATES PATENT OFFICE.

FREDERICK H. C. MEY, OF BUFFALO, NEW YORK.

IMPROVEMENT IN HOISTING-BUCKETS.

Specification forming part of Letters Patent No. **212,317**, dated February 18, 1879; application filed January 9, 1879.

To all whom it may concern:

Be it known that I, FREDERICK H. C. MEY, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on an Elevator-Bucket; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has special reference to improvements on elevator-buckets; and it consists in the peculiar arrangement of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings already mentioned, Figure 1 is a perspective view of my improved bucket. Fig. 2 is a front, and Fig. 3 an end, elevation. Fig. 4 is a plan.

Like parts are designated by corresponding letters of reference in all the figures.

A is the band, and B B′ are the two heads, of my bucket. C is the belly. This band, which I prefer to cast of malleable iron or steel, I provide at opposite sides with projecting lugs D D′, the inner opposite sides of which are beveled to form a dovetail mortise or socket, into which I place a cross-bar, E, having on both its ends lateral flanges F, the edges of which are also beveled to fit the dovetail socket or mortise, said cross-bar being retained in position by rivets, screws, or similar means, *f*.

The front side, G, of this band is made narrower than the rear side, G′, while the sides G″, Figs. 1, 3, and 4, are tapered accordingly. This arrangement affords a perfect distribution of the material employed, and produces a band of superior strength to one having an equal amount of metal in the band, but the band made of equal width and thickness throughout, inasmuch as the rear side, G′, in my bucket, which is attached to the usual belting and sustains the weight of the bucket and its load, has the preponderance of metal, while the front edge, which is not subjected to any particular strain, has the smaller portion thereof.

The sides B have preferably set-up edges *b*—that is to say, have their edges bent at right angles to their planes; and they are riveted to the belly C, and, together with the latter, to the band A, in the usual manner. These heads may, however, be double-seamed to the belly, or secured thereto in any other convenient manner.

The belly C is made smaller or narrower at its bottom *a* than at its top *a′*, Fig. 2, so as to produce a bucket which is narrower at its bottom than at its top. This arrangement has the particular advantage of causing an easy discharge of the bucket, particularly with such substances as flour, cement, sand, or other wet or slightly-adhesive substances, which are very apt to stick to the bucket if the discharge is not instantaneous.

In elevator-buckets, the side which is fastened to the belting is always very apt to be bulged in, on account of its striking the driving-pulleys, &c. To avoid this obstacle I provide the heads B B′ with stiffeners B″, consisting of sheet-metal strips riveted or otherwise secured to said bucket.

The particular advantages of a bucket constructed as described are that, by means of the arrangement with the band of the cross-bar E, inserted into the dovetail sockets described, I am enabled to insert or withdraw said cross-bars at any time without removing them from the belting. Thus, for instance, in elevating light substances the cross-bars may be removed, and the buckets used without them, while, when afterward comparatively heavy substances are to be elevated, they may be readily reinserted. It gives me, furthermore, the advantage of supplying the purchaser with buckets without bars, and at any time thereafter when desired with the cross-bars.

It will be readily observed that, on account of the beveled socket and tenon arrangement of the band and cross-bar, the upper opposite sides of said band are drawn tightly together, and the front side of the same perfectly braced, much more so than in bands having a rigid cross-bar formed in one piece with said band, while the advantages derived from such construction render the bucket more desirable and cheaper, owing to its greater freedom from loss in casting.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent—

1. An elevator-bucket having the side-stiffeners B″, as and for the purpose stated.

2. As an improved article of manufacture, an elevator-bucket having the flat ends arranged convergingly, as specified, and the band provided with projections D D′, forming a dovetail socket for the cross-bar E, as and for the purpose stated.

3. In elevator-buckets, a band having its rear side, G′, made wider and thicker than its front side, G, and the sides G″ made tapering, as and for the object specified.

4. In elevator-buckets, a band having dovetail sockets, as specified, for the purpose stated.

5. The combination, with the band A, having the projections D D′, forming sockets, of the cross-bar E, having lateral flanges F, forming tenons, said cross-bar being arranged to be inserted into said socket and retained therein by the fastening *f*, as and for the object specified.

In testimony that I claim the foregoing as my invention I have hereto set my hand and affixed my seal in the presence of two subscribing witnesses.

FREDERICK H. C. MEY. [L. S.]

Attest:
MICHAEL J. STARK,
A. STARK.