W. H. BURDINE & C. D. COWGILL.

Elevator-Bucket.

No. 217,580. Patented July 15, 1879.

Fig. 1.

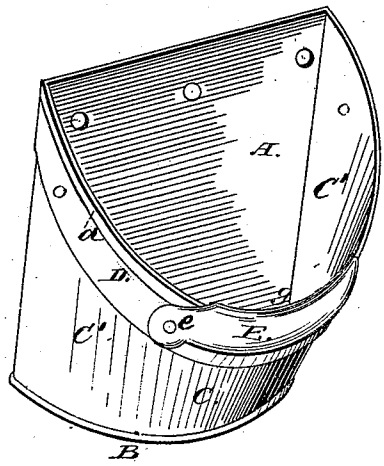



Fig. 2.

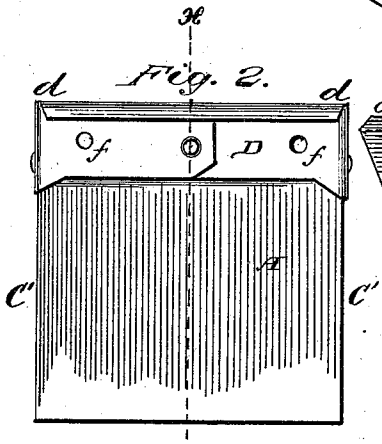



Fig. 4.

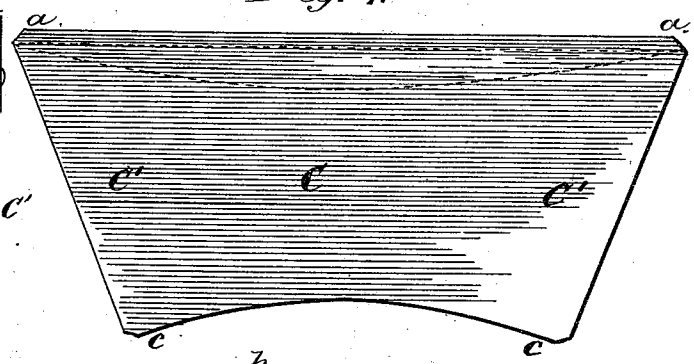



Fig. 3.

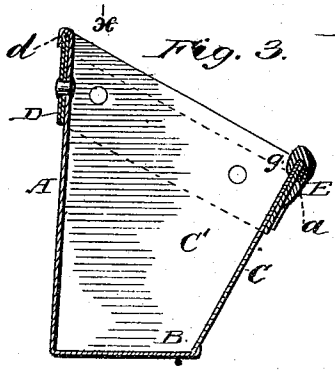
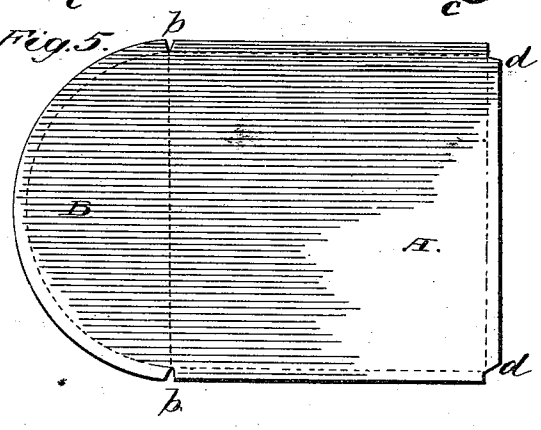



Fig. 5.




Witnesses

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# UNITED STATES PATENT OFFICE.

WILL H. BURDINE AND CHRISTIAN D. COWGILL, OF TERRE HAUTE, IND.

## IMPROVEMENT IN ELEVATOR-BUCKETS.

Specification forming part of Letters Patent No. **217,580**, dated July 15, 1879; application filed May 12, 1879.

*To all whom it may concern:*

Be it known that we, WILL H. BURDINE and CHRISTIAN D. COWGILL, both of Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Elevator-Buckets; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a rear elevation. Fig. 3 is a vertical section on line *x x*, Fig. 2. Fig. 4 is a plan of the flat blank for forming the front section of the bucket; and Fig. 5 is a similar view of the blank for forming in one piece the back and bottom sections.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to elevator-buckets; and consists, first, in providing buckets of this class with a lipped shield or guard upon the front edge or dip, to prevent wear of the rim of the bucket; and, secondly, in the construction of the bucket from two blanks in such a manner as to economize material and at the same time produce a bucket of great carrying capacity, substantially as hereinafter more fully described, and pointed out in the claims.

In the drawings, A is the back, and B the bottom, of our improved elevator-bucket, which are made in one piece from a sheet-metal blank of the configuration represented in Fig. 5—that is, having a square part or section, A, and an adjacent semicircular part, B, made with two notches, *b b*, as shown. This semicircular part, when bent after the dotted line *b b*, Fig. 5, at an angle of about eighty-five degrees, forms the bottom of the finished bucket.

The curved front and sides C′ C C′ are also made from a flat blank, (shown in Fig. 4,) which is cut with a straight upper edge, having beveled corners *a a*, and a concave lower edge, *c c*, of lesser length, so as to make the sides *a c a c* incline toward the bottom.

In forming the bucket from these blanks, the side and bottom edges of the back and bottom blank A B are struck up to form a flange after the dotted lines in Fig. 5, to which the sides and bottom of the blank C′ C C′, after this has been bent into the requisite shape, are secured by soldering, or in any other durable and suitable manner.

To increase the strength of the bucket, we use a band, D, of hoop or strap iron, which is placed around the upper rim, the upper flange, *d d*, of the back section A being turned down over it, as is also the upper rim, *a a*, of the front and sides C′ C C′, as shown more clearly in the sectional view, Fig. 3. The overlapping ends of the band D are riveted together upon the back of the bucket, and holes *f f* are punched through the back A and band D, by means of which the bucket may be riveted upon the elevator band or apron.

E is a shield or guard, made of malleable or cast iron, curved to conform to the curvature of the front part of the bucket, upon the upper rim of which it is secured by rivets *e*. This shield or protector is provided with a lip, *g*, which overlaps the central part of the upper edge or rim, as shown in Fig. 3, the upper edge of the guard E projecting above the edge of the bucket along its curved front part.

When the guard E has been worn down to the edge of the bucket, it may easily be removed by punching out the rivets, and a new guard substituted, as the bucket itself sustains no wear, and will be as good as new.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. In an elevator-bucket, the edge-guard E, provided with the lip *g*, substantially as and for the purpose set forth.

2. An elevator-bucket composed of the square back part A and semicircular bottom part B made in one piece, and the bent front and side sections C′ C C′, cut with a straight upper edge, inclined sides, and a concave lower edge, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

WILL H. BURDINE.
CHRISTIAN D. COWGILL.

Witnesses:
GEO. M. EARLY,
JNO. C. WARREN.