

W. H. & W. J. CLARK.
Elevator-Bucket.

No. 222,665.

Patented Dec. 16, 1879.

Fig 1

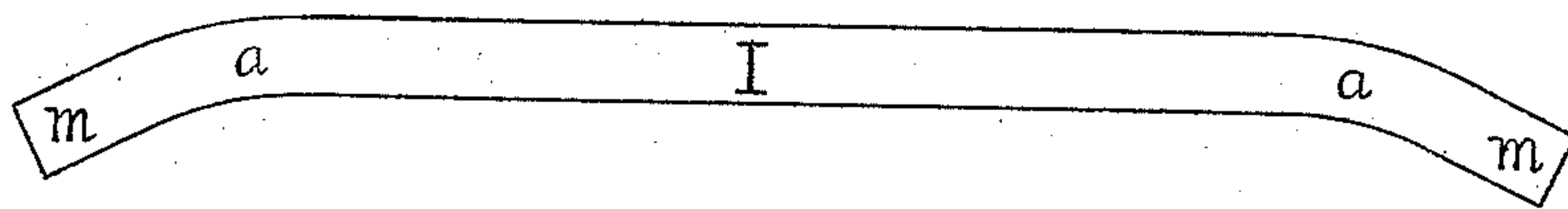


Fig. 2.

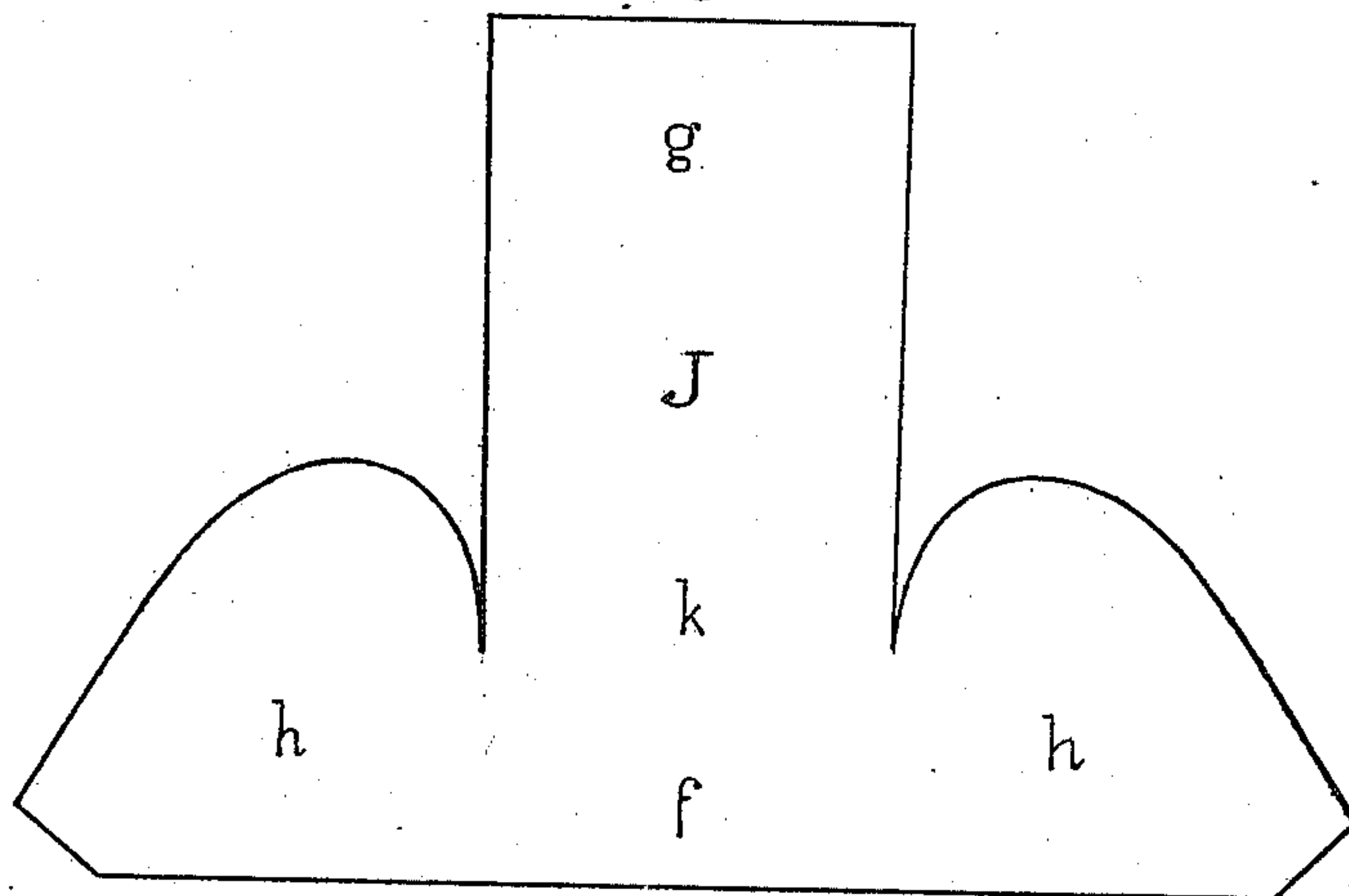


Fig. 3.

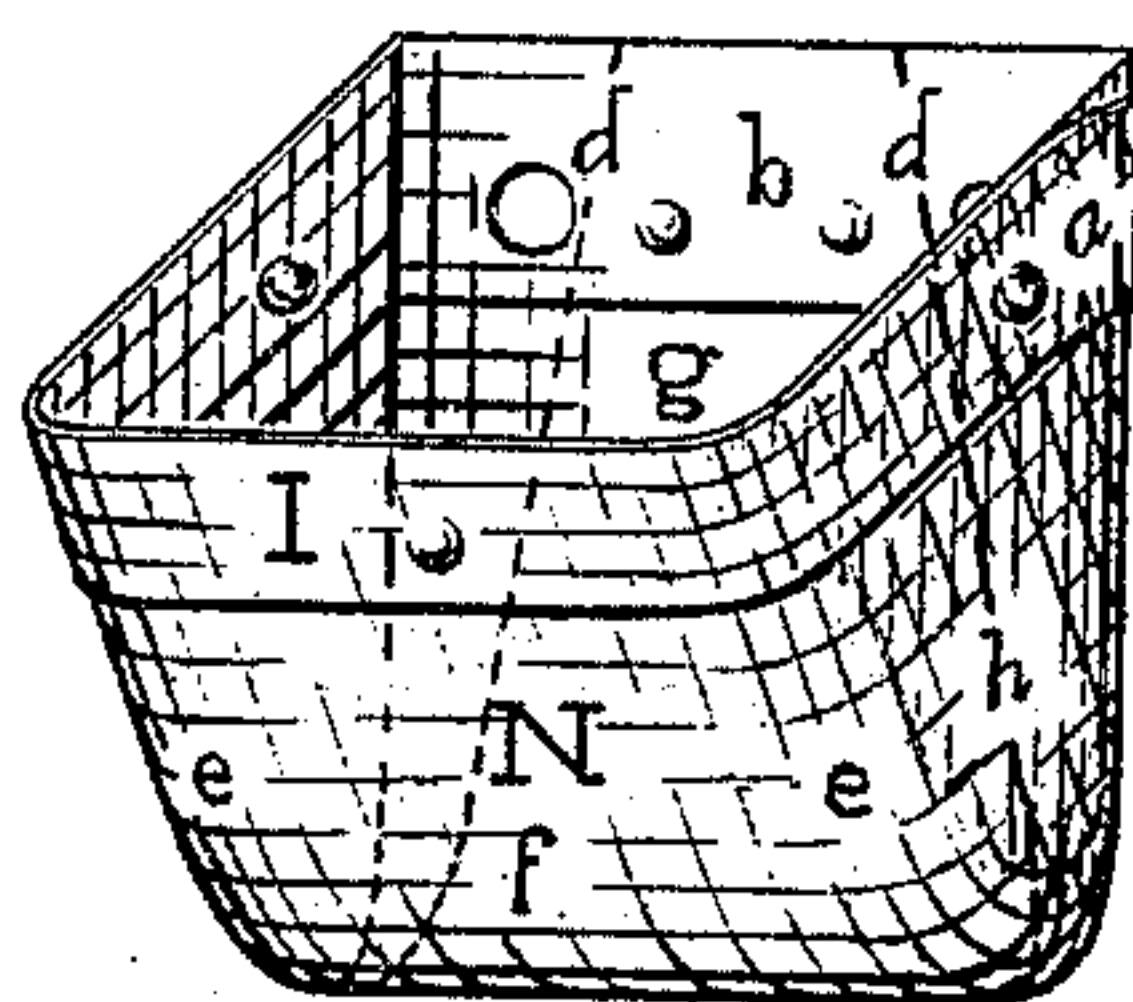
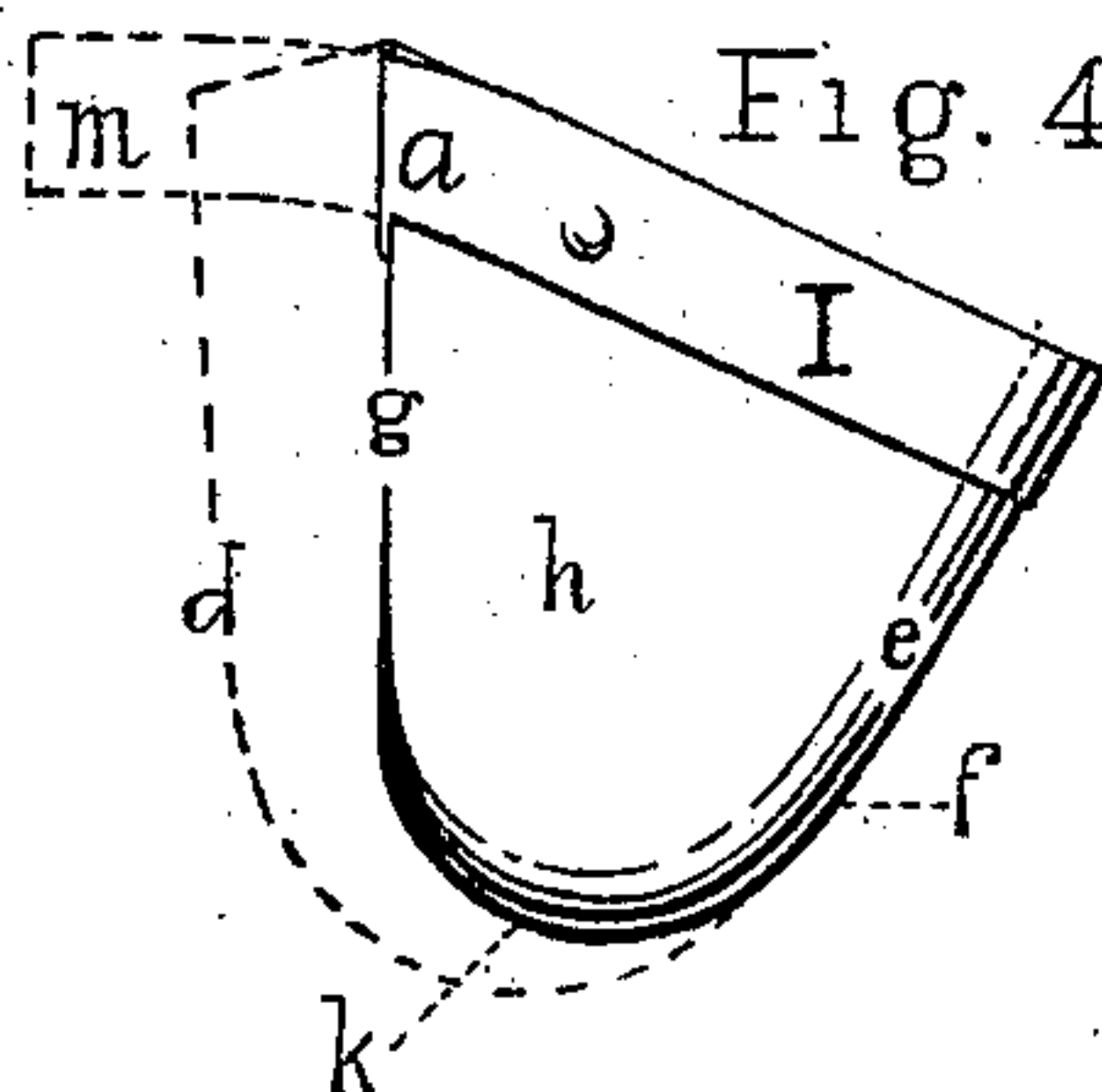


Fig. 5.



Fig. 4.



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WILLIAM H. CLARK AND WILLIAM J. CLARK, OF SALEM, OHIO.

IMPROVEMENT IN ELEVATOR-BUCKETS.

Specification forming part of Letters Patent No. 222,665, dated December 16, 1879; application filed October 13, 1879.

To all whom it may concern:

Be it known that we, WILLIAM H. CLARK and WILLIAM J. CLARK, of Salem, in the county of Columbiana and State of Ohio, have invented a new and useful Improvement in Elevator-Buckets, of which the following is a description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan view of a blank which is to be fitted around the body of the bucket N and makes the wearing-guard I. Fig. 2 is a plan view of a blank which makes the body of the bucket N. Fig. 3 is a perspective view of the bucket N. Fig. 4 is an end view of the bucket N. Fig. 5 is an end view of the binding-piece *b* detached.

Like letters refer to like parts in the several views.

This improvement relates to buckets of sheet metal, adapted to being attached to bands working on pulleys, and thereby operated to dip and carry from a lower to a higher place of deposit flour, grain, &c. Such buckets are made in various shapes; but all have heretofore had angular interior corners, which are objectionable, as they do not always empty clean. The most approved buckets are made with the plane of their upper edge or mouth at an acute angle with their back, and the band or wearing-guard around said mouth is therefore commonly made in two pieces, lapped and riveted together at the ends of the bucket, and to afford sufficient lap where the two pieces join, they must be wider than would otherwise be required. Considerable weight is thereby added, and the thickness of the edge of the bucket-mouth is increased by said laps, both of which are objectionable.

The desirability of a wearing-guard made in a single piece is therefore evident; but as such guards have been made before, it is the special shape and construction in our guard that constitutes our improvement.

The object of our invention is to produce an elevator-bucket better suited in shape and construction to its uses than those made heretofore.

We are aware that bucket-bodies have been made in a single piece before in various ways,

and what we claim as new in ours is its peculiar shape and freedom from angular corners at the bottom and lower part of the back; also, the edgewise bends *a* in the wearing-guard I, the purpose of which is hereinafter more fully specified.

A more full and complete description of the invention is the following:

In the drawings, J, Fig. 2, represents a sheet-metal blank, so cut that when pressed or stamped into shape it will make in a single piece the body of the bucket N, Figs. 3 and 4, consisting of the front *f*, bottom *k*, back *g*, and ends *h*, the whole being held together by lapping a part of the ends *h* around outside of the back *g* and bottom *k*, as shown by the dotted lines *d*, Fig. 3, and soldering or riveting the laps. The dotted line *d*, Fig. 4, shows the lap before it is bent around outside of the back *g* and bottom *k*.

The ends *h* might be made of separate pieces; but it is preferable to make the entire body in a single piece, as described.

The shape peculiar to the body of our bucket N, and by means of which we avoid the objectionable angular corners previously mentioned, is as follows: The ends *h* and upper part of the back *g* and front *f* are flat; the bottom *k* and lower part of back *g* and front *f* are curved parallel with the flat portions of the back *g* and front *f*. The back *g*, front *f*, and bottom *k* may be flat, and curved only enough to avoid angular corners where they join each other; but the previously-described shape is preferred, and the corners *e* are rounded, except at and near the top of the back *g*, where they are not liable to become clogged, and where it is desirable to give the back the widest possible bearing to prevent the bucket from wobbling.

We are aware that buckets have been made before having their front portion, *f*, formed with rounded corners, to prevent catching upon the elevator-cases through which they run, and, though shown in connection with our improvement, we claim only as our invention the rounded corners at the junction of the ends *h* with the bottom *k* and lower part of the back *g*, the rounding of said corners being to facilitate clean delivery.

Fig. 1 is a plan view of the blank I, the ends

m being bent edgewise at *a*, to adapt it to being formed around the mouth of the bucket-body, the plane of said mouth being at an acute angle with the back *g*. The dotted lines in Fig. 4 show the end *m* before it is bent around against the outside of the back *g*. Without the bends *a* an objectionably-wide band must be used, so that after trimming off that portion of its ends which would project above the top of the back *g*, enough would remain to receive the bolt-holes and properly stiffen the back *g*. If a narrower band were used, its ends would have to be forced down until their upper edge coincided with the top of the back *g*, and the necessity for trimming away any portion of them thereby removed; but in so doing wrinkles would be made in the band at the corner of the back *g*, which would be objectionable.

A binding-piece, *b*, Figs. 3 and 5, straddles the upper part of the back *g* and the laps *d*, also the ends *m* of the guard *I*, the office of

said piece *b* being to stiffen the back *g* and bind together the parts just named.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. An elevator-bucket, *N*, when formed with rounded corners at the junction of the ends *h* with the bottom *k* and lower part of the back *g*, substantially as and for the purpose specified.

2. In combination with an elevator-bucket having the plane of its mouth at an acute angle with its back, a band or wearing-guard, provided with the edgewise bends *a*, substantially as described, and for the purpose specified.

3. An elevator-bucket, *N*, having the parts *g k f h e I b*, substantially as described, and for the purpose specified.

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Witnesses:

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