J. Magee,

Hoisting Bucket.

No. 51,603. Patented Dec. 19, 1865.

Fig. 1

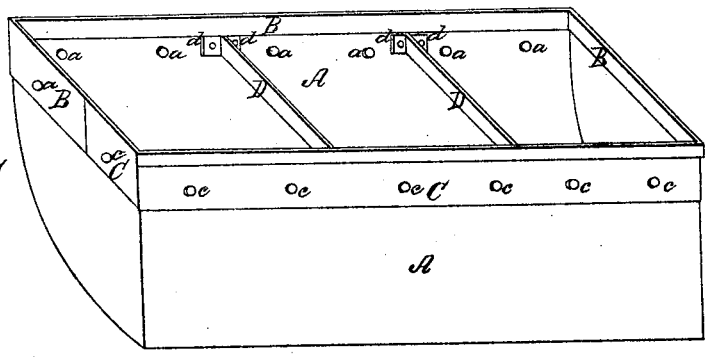

Fig. 2

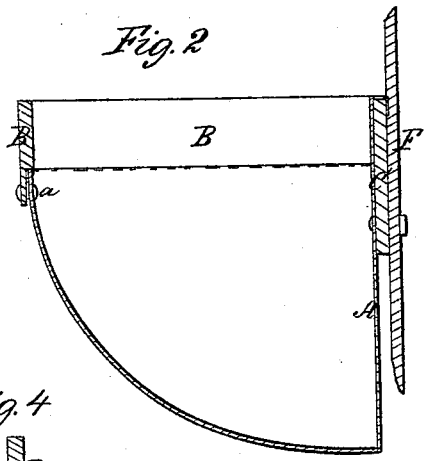

Fig. 3

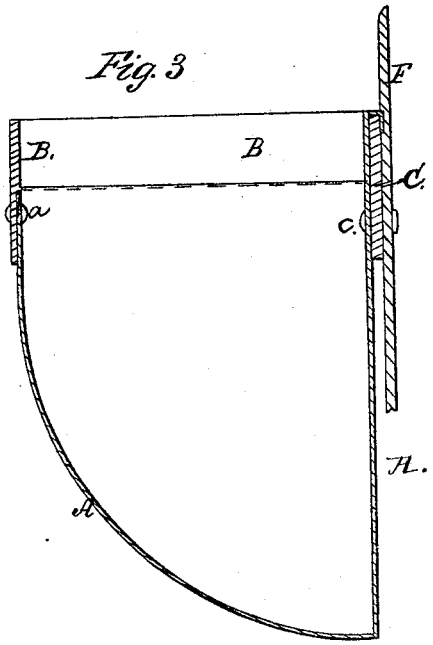

Fig. 4

Fig. 5

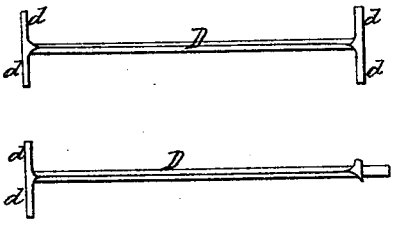

Fig. 6

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UNITED STATES PATENT OFFICE.

JOHN MAGEE, OF CHICAGO, ILLINOIS.

IMPROVED ELEVATOR-BUCKET.

Specification forming part of Letters Patent No. **51,603**, dated December 19, 1865.

To all whom it may concern:

Be it known that I, JOHN MAGEE, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Elevator-Buckets; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

The nature of my said invention consists in a novel mode of constructing the edge of the bucket so as to render the same much more durable and less liable to get out of repair, and also in a novel mode of bracing or strengthening the bucket, all as hereinafter more fully specified and described.

To enable others skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents an isometrical view of my invention. Fig. 2 represents a transverse section of an improved form of elevator-bucket with my invention applied. Fig. 3 represents a similar view of the bucket in the usual form. Fig. 4 represents a detached cross-sectional view of the front edge of the bucket. Fig. 5 is a plan view of the braces for strengthening the bucket, and Fig. 6 is a transverse section of the same.

Similar letters of reference in the different figures indicate the same parts of my invention.

My invention or improvement is equally applicable and equally useful whatever may be the particular form of the bucket; but I prefer to construct the bucket substantially in the form shown in Fig. 2, for the reason that when the old form is used, as it passes over the top of the elevator where the grain is to be discharged, all of the grain is not discharged at the proper time, and being retained until the bucket descends the back or descending box in a reversed position the grain is thus wasted and lost, which loss is wholly obviated by constructing the bucket in the approved form, as shown in Fig. 2. Furthermore, by constructing the curved part of the bucket upon the arc of a circle, its passage through the grain is effected with much less power as it glides easily through the same, the edge lying in such a manner as to present the least possible surface to create friction or resistance.

My said invention consists specifically in attaching to the front edge of the bucket a strip of rolled or band iron, said band being rabbeted upon its interior surface, so that the tin, sheet-iron, or other material of which the body of the bucket is composed may lie in the said rabbet or depression in the band, so that the interior surface of the bucket shall lie flush with, or in the same plane with, the inner face of the edge of said band, forming also the edge of the bucket.

A represents the body of the bucket, which may be of tin or any other sheet metal; and B represents the before-mentioned strip or band of iron provided with the depression upon its lower interior surface, upon which the upper part of the front A rests, and to which it is riveted or properly secured by the rivets marked *a*, as shown. The upper edge of A may be folded down, as shown, so as to fill up said depression in B and bring the sheet or interior of the bucket out flush with the interior face of the band B, as shown. The said grooved band B is brought back across the ends of the bucket to the back thereof, and the upper edges of the ends of the bucket are folded down and secured to the band B in the same manner as at the front, making the ends of said bucket flush with the interior face of the band B, as aforesaid.

Across the back of the bucket is secured, by suitable rivets, the plain band of iron marked C, which is brought around the corners and across the ends about one-third of the distance to the front edge, and are secured by rivets, as shown. The back of the bucket A is carried up over the rear band, C, and turned down, as shown, thus making the entire interior surface of the bucket perfectly smooth, so as to present no frictional surfaces or shoulders to impede or in any way interfere with the free and perfect operation of the same, as desired.

D D represent the braces extending from front to rear of the bucket, as shown, for the purpose of strengthening and keeping the bucket in proper shape. The ends may both be constructed in the form of the letter T, or only one of said ends, as shown in Fig. 5.

It will be observed that the upper edges of said braces are in form of an acute angle, so

as to present the least possible resistance when passing through the grain, and the arms at the ends of said braces are to prevent the possibility of said braces being turned so as to present their broad sides to the grain, which would cause great resistance and require much greater power to operate the elevator.

Having described my invention, I will now set forth specifically what I claim and desire to secure by Letters Patent.

1. Providing the front edge of the bucket A with the wrought rabbeted metallic band B, constructed as shown, and arranged and operating substantially as herein described.

2. The arrangement of one or more braces, D, provided with the shoulders *d*, with the bucket A, constructed with the rabbeted bar B, as as and for the purposes shown and described.

JOHN MAGEE.

Witnesses:
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W. E. MARRS.