J. S. Brooks,

Hoisting Bucket.

No. 37,215. Patented Dec. 23, 1862.

Fig. 1.

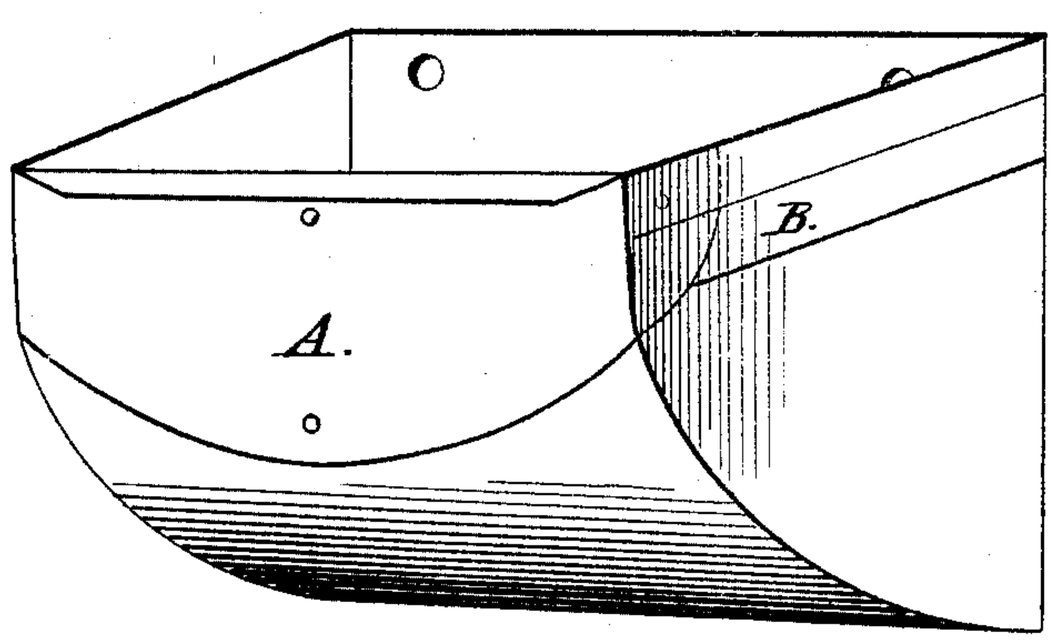


Fig. 2.

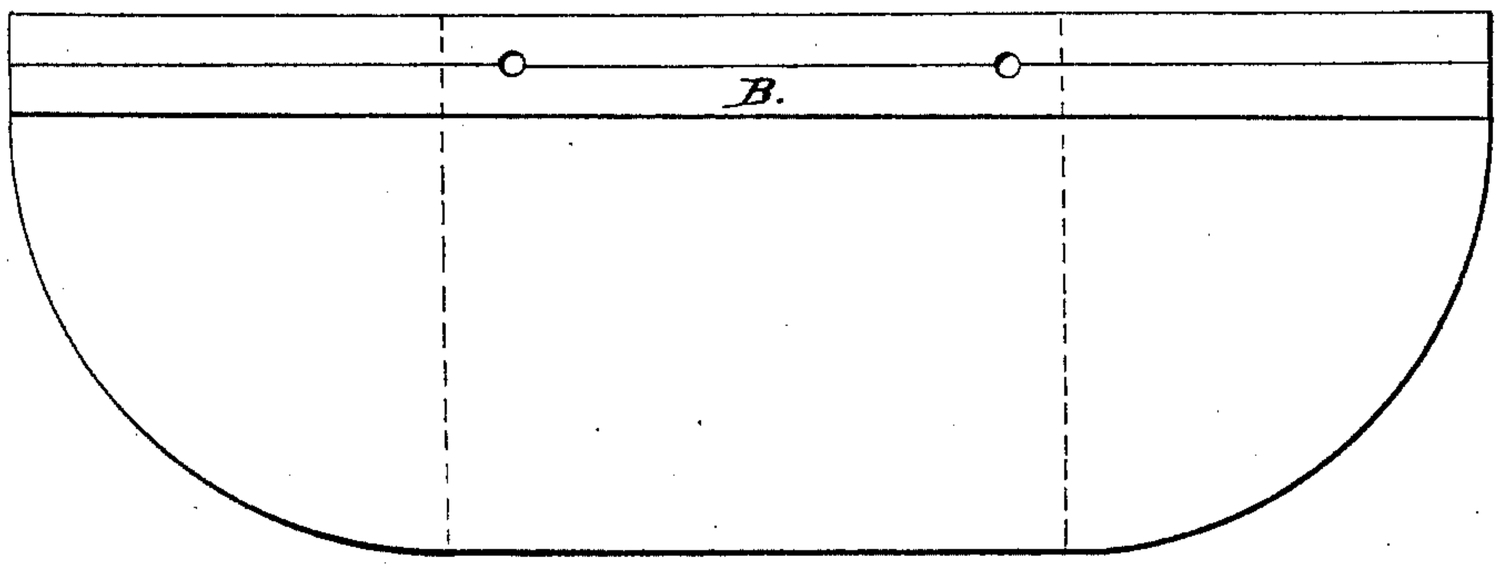
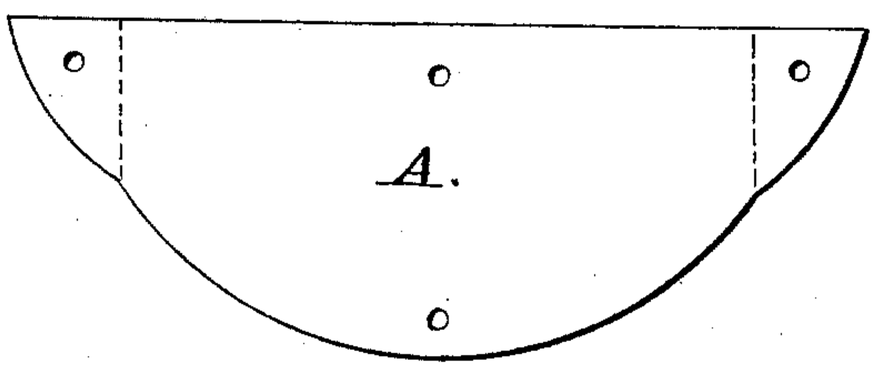


Fig. 3.



Witnesses:
S. S. Lanphman
I. a. Buck.

Inventor.
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UNITED STATES PATENT OFFICE.

JOHN S. BROOKS, OF ROCHETER, NEW YORK,

IMPROVED ELEVATOR-BUCKET.

Specification forming part of Letters Patent No. **37,215,** dated December 23, 1862.

To all whom it may concern:

Be it known that I, JOHN S. BROOKS, of the city of Rochester, county of Monroe, in the State of New York, have invented an Improved Elevator-Bucket; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the same. Fig. 2 is a longitudinal elevation of the back and ends. Fig. 3 is a top view of the steel shield.

Like letters designate corresponding parts in all the figures.

My improved elevator-bucket may be constructed in any of the usual forms for such articles. Fig. 1 shows the ordinary shape of them.

A represents a plate of steel, which should be made and formed to fit the front part of the bucket, covering the part most exposed to wear by the friction of the grain when ascending, and with the wooden spout in descending. It should be tempered, and may be fastened to the bucket by rivets. Observation shows that these buckets, when made, as heretofore, wholly of tin or sheet-iron, after about two years' use will be worn out on the front, leaving them somewhat the shape of Fig. 1 below the steel plate, or in a circular form at the top edge. This plate of steel will add but little to the cost of construction, and must equalize the wear so much that buckets having it on, it is believed, will wear at least three times as long as without it. The advantage of this will be appreciated when considering the large number annually worn out in flour-mills and grain-elevators. Next to the wear of the front edge, the buckets usually fail at the two back corners where the ends and back are commonly seamed together from separate pieces, and as most of the strain is on these points, they are frequently burst open. To remedy this I construct the back and ends from one piece of metal, as shown in Fig. 2, the dotted lines of which mark the angle. The top should be turned over double while flat, and the piece of iron B, which is a strip of hoop-iron, inclosed between the two parts, as shown in the drawings. As there will be no seam in the two back corners it will bear a much greater pressure than if made with a seam. The front is attached in the ordinary manner, and is also kept from bursting open at the seams by the steel plate, the ends of which should be carried around onto the ends, and riveted through them and the iron hoop, as shown by the drawings.

Fig. 3 shows the shape of the steel plate, and which, it is belived, answers the purpose of protecting the bucket, and is also economical in the use of steel.

For buckets used wholly for elevating grain it may be advisable to make the entire front of steel.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The employment of a shield or facing of steel, or its equivalent in any hardened metal, to elevator-buckets, as and for the purposes shown and described.

2. In combination with the above, the mode of putting the iron band around the back and ends while they are flat, and fastening it to the steel facing, as and for the purposes shown and described.

JOHN S. BROOKS.

Witnesses:
WM. MORAN,
W. A. ADAMS.