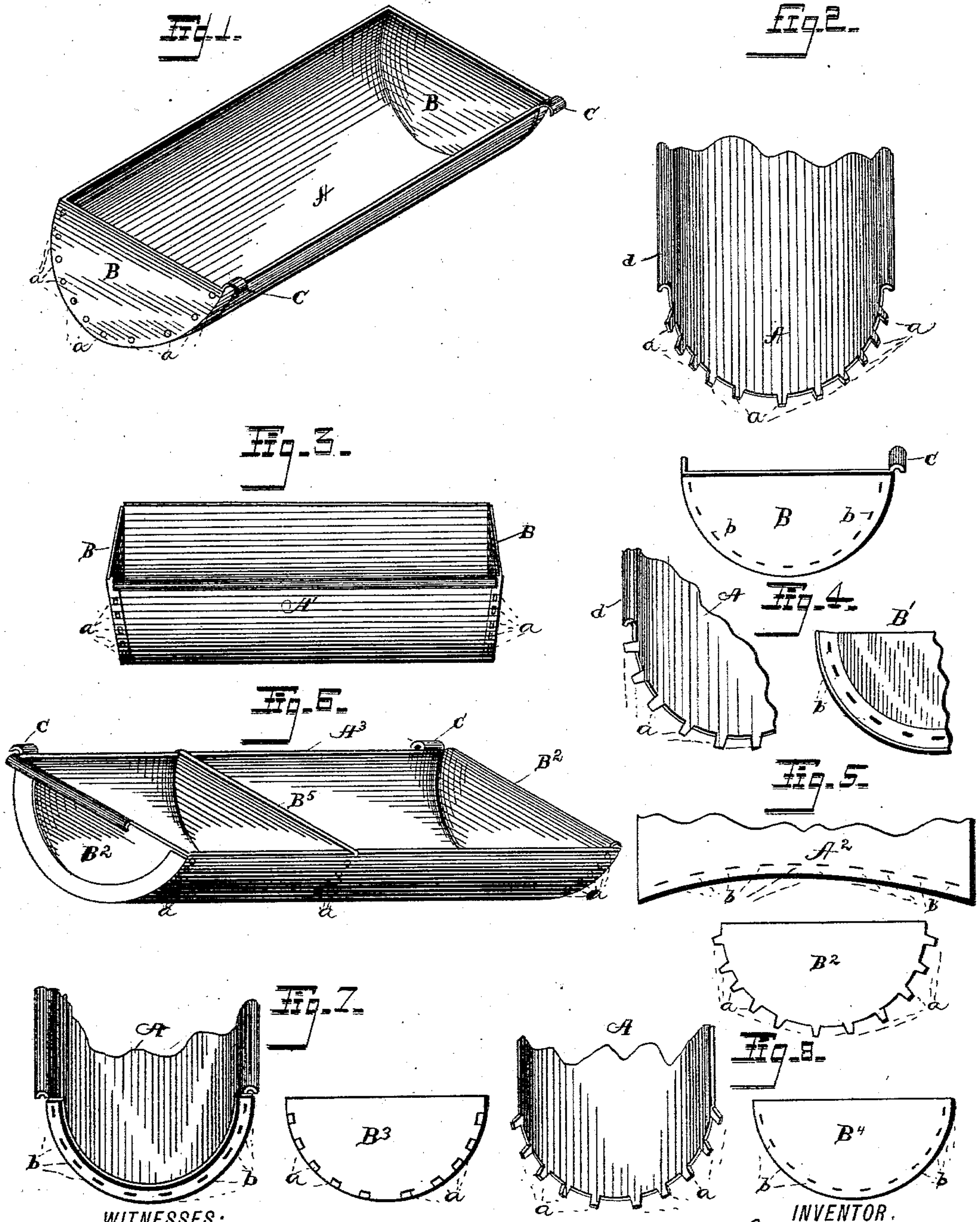


(No Model.)

W. G. AVERY.
ELEVATOR BUCKET.

No. 414,483.

Patented Nov. 5, 1889.



WITNESSES:

J. M. Fowler
Chas. J. Croftman

INVENTOR.

William G. Avery.
BY
Chas. E. Barber
His ATTORNEY, in fact.

UNITED STATES PATENT OFFICE.

WILLIAM G. AVERY, OF CLEVELAND, OHIO.

ELEVATOR-BUCKET.

SPECIFICATION forming part of Letters Patent No. 414,483, dated November 5, 1889.

Application filed March 21, 1888. Serial No. 268,047. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. AVERY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Elevator-Buckets, of which the following is a specification.

The object of my invention is to provide a strong, cheap, and easily-constructed device of sheet metal, adapted to be used as an elevator-bucket, that may be shipped in a knock-down condition and be readily put together by the user.

My device is fully described herein, and shown in the accompanying drawings, and the matter constituting my invention is defined in the claims.

In the drawings, Figure 1 is a perspective view of one of the forms of my device. Fig. 2 is a detail, partly in section, of the form of device shown in Fig. 1. Fig. 3 is another form of my invention. Fig. 4 is a detail in section of the form shown in Fig. 3. Fig. 5 is a detail, partly in section, of a third form of device. Fig. 6 is a perspective view of another form of my invention. Fig. 7 is a detail, partly in section, of another form; and Fig. 8 represents details of still an additional form of my device. These different figures are more fully described herein.

I unite the parts of my device by means of lugs a or a' , formed on one or more of its parts and integral therewith, and pass said lugs through perforations b in the opposite piece and secure them by riveting, as shown by Figs. 1 and 6, or by turning the lugs down, as shown in Fig. 3.

Several forms of my device may be made. The lugs a may be formed on the ends of the body-piece A and pass through perforations in the face of a flanged end piece B , as shown in Figs. 1 and 2; or the lugs formed on the ends of the body-piece A may be turned outwardly, as a' , and pass through perforations b in the flange of a flanged end piece B' , as shown by Figs. 3 and 4; or the lugs a may be formed on the end pieces B^2 and pass through perforations b near the ends of the body-piece A^2 , neither part being flanged, as shown by Fig. 5; or the lugs a of an end piece B may pass through perforations in the face of a flanged body-piece A^3 , as shown in Fig. 6;

or the lugs may be turned out, as shown by a' of B^3 , and pass through perforations b in the flange of a flanged body-piece A^4 , as shown by Fig. 7; or the lugs a , formed on the ends of a body-piece A , may pass through perforations b of an end piece B'' having no flange, as shown in Fig. 8. The flange of B may be extended and hooked, as shown at c , to furnish a means of attachment, and the outer edge of the bucket may be turned or rolled, as shown at d , to avoid the sharp edge of the metal and strengthen the same. To give greater strength, when made of considerable length, one or more partitions B^5 , as shown in Fig. 6, may be placed in the elevator-bucket. These partitions are similar to B^2 of Fig. 5, having lugs a to pass through perforations in the body of the trough and be secured by riveting or turning down, as already shown.

In making my device I form the lugs a on the body-piece A while the sheet metal is in the flat. This may be done by any well-known means for cutting or stamping sheet metal. If it is desired to make the form shown in Fig. 3, I next bend said lugs outwardly, as shown at a' in Fig. 4. The body-piece is then bent into the required form and the end pieces are secured thereto. In making the form shown in Fig. 7 the lugs a' are formed on the end piece, as shown at a of B^2 in Fig. 5, and then turned outwardly, as shown at a' of B^3 in Fig. 7. The perforations b may be made by any well-known process. When the perforations b are made in a flanged piece, it is preferable to first turn the flange, as the inner edge of the flange will aid in placing the perforations. The width of said lugs may vary according to the thickness and quality of the metal. They will always be made of sufficient length to go through the opposite piece of metal and be riveted or turned down, as shown. They should fit snugly in the perforations made to receive them. The body-piece should be rounded from its back elevation toward its upper front edge, substantially as shown in the drawings. With such form of body-piece the ends may be made vertical, or approximately so, and still allow a perfectly free discharge of the contents of the bucket, which in practice is found to be impracticable with any other form of body-piece. This gives a greater wearing-surface

on the ends of the bucket, which is considerable, owing to the wobbling motion of the bucket when in use. This form also gives a larger capacity to the bucket than any other practical form.

These buckets may be made water-tight by running solder around the joints.

Elevator-buckets of my construction may be shipped in a knocked-down condition, thus effecting a large saving in freightage. They are very strong, and may be made of any quality of sheet metal.

I am aware that other articles have been made having flanged end pieces secured to the body-piece by means of independent rivets passing through the body-piece and the flange of the end piece; but such device does not anticipate my invention, wherein the rivets are formed integral with the body-piece, as shown.

Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a bucket of the character described, the combination of a main body portion and an end piece, one of which is provided with a flange, and one of said parts also having perforations and the other corresponding projections, whereby the said parts may be united, substantially as described.

2. In a bucket of the character described, the main body portion provided with a flange at the end, in combination with an end piece adapted to be secured to the main body portion, one of said parts being provided with perforations and the other with corresponding projections, whereby they may be secured together, substantially as described.

WILLIAM G. AVERY.

Witnesses:

E. E. ARCHER,

MERTON G. WOODBURY.