

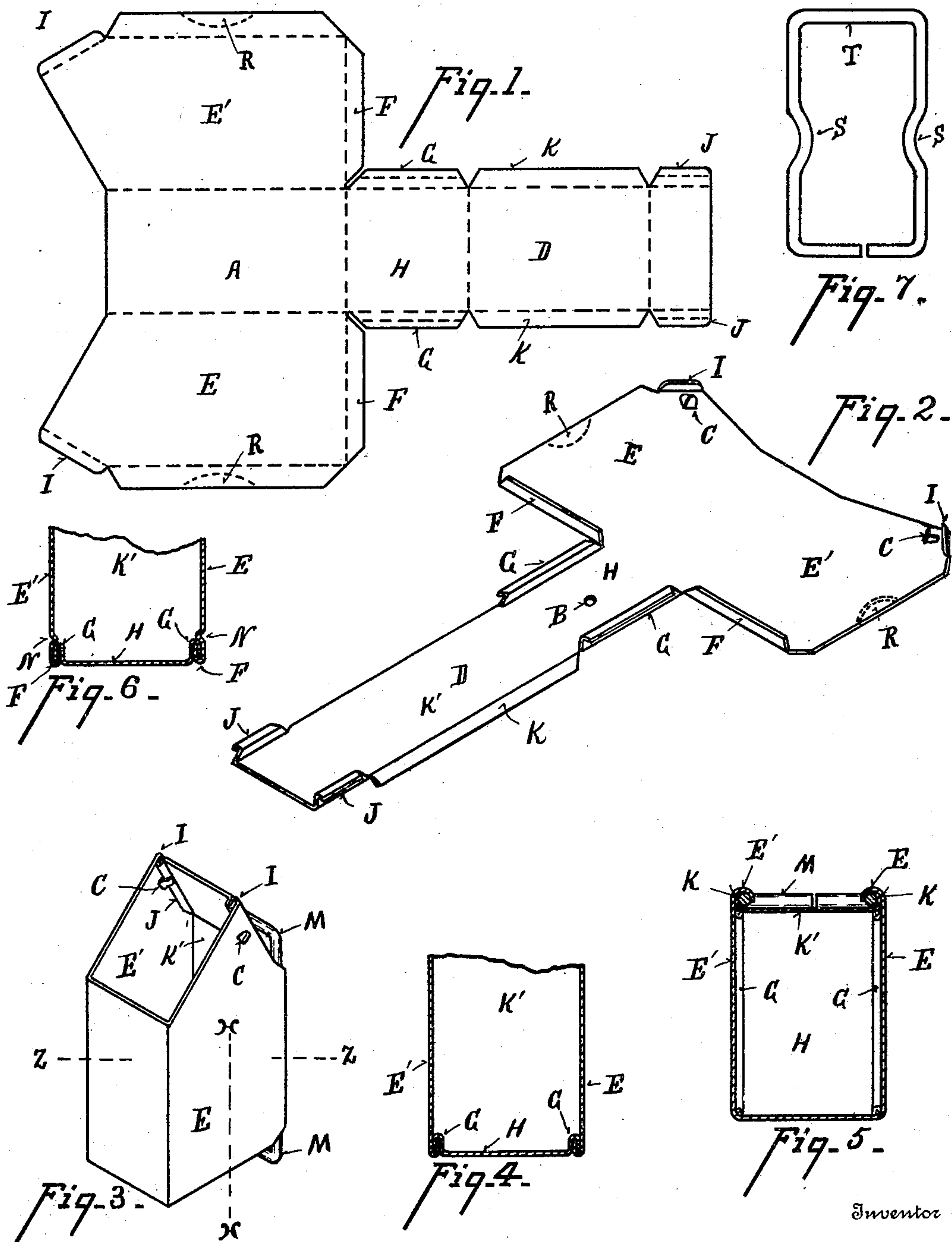
No. 694,245.

Patented Feb. 25, 1902.

L. A. BRIGEL, JR.
CONVEYER BUCKET.

(Application filed Apr. 10, 1901.)

(No Model.)



Inventor

Witnesses
Leas. Ludlow
J. H. Charles Smith

Leo A. Brigel Jr.
James N. Ramsey Attorney

UNITED STATES PATENT OFFICE.

LEO A. BRIGEL, JR., OF CINCINNATI, OHIO.

CONVEYER-BUCKET.

SPECIFICATION forming part of Letters Patent No. 694,245, dated February 25, 1902.

Application filed April 10, 1901. Serial No. 55,180. (No model.)

To all whom it may concern:

Be it known that I, LEO A. BRIGEL, JR., a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Conveyer-Buckets, of which the following is a specification.

My invention relates to improvement in sheet-metal bucket for bucket-pumps. One of its objects is to provide a bucket having a smooth exterior and with all the seams formed in the interior of the bucket.

Another object is to provide a suitable blank from which the bucket may be formed with the seams on the interior and preferably from a single piece of sheet metal.

Another object is to provide a stronger bucket and one requiring no soldering and which can be formed by machinery.

My invention consists in certain details of form, combination, and arrangement, all of which will be more fully set forth in the accompanying drawings, in which—

Figure 1 is a plan view of the blank from which the bucket is to be formed. Fig. 2 is a perspective view of the blank in the second step with the flanges stamped up ready to unite and form the seams. Fig. 3 is a perspective view of a completed bucket. Fig. 4 is a section through the same on line *x x* of Fig. 3, showing the manner of forming the bottom seam. Fig. 5 is a section on line *z z* of Fig. 3, showing the manner of forming the bucket and securing the link thereto. Fig. 6 is a section similar to Fig. 4, showing a modification thereof. Fig. 7 shows a modification of the link.

The manner of constructing the bucket is as follows: A blank A of substantially the form shown in Fig. 1 is first cut or stamped from sheet metal. This blank is then placed in a die and stamped up to the form shown in Fig. 2. A hole B is pierced in the section H, which forms the bottom of the bucket, so that the buckets will drain and not freeze in cold weather. Small ears or lugs C are also preferably struck up from the blank. The blank, Fig. 2, then is placed in a forming-machine and the tail-section D bent up and over a former of substantially the shape of the interior of the bucket, after which the side flaps E E are bent up against the sides

of the former, which causes the fins F of the side flaps to engage and clench with the fins G of the bottom H, while the fins I clench with the fins J. The ears C are pressed down upon the fins J, as shown in Fig. 3, to lock the parts together. The fins K of the back K' abut against the inside of the outer edges of the side flaps E. By a subsequent operation the link M is secured to the bucket by bending the fins K and outer edges of the side flaps E around the link, as shown in Fig. 5. If desired, a groove N may be formed in the sides to lock the fins forming the seams against retraction. A similar groove may be formed in connection with the fins I J and the ears C dispensed with. The bucket is finally galvanized, securing all the joints and protecting the bucket from corrosion, or the bucket may be constructed of galvanized material.

It will thus be noted that I am enabled to form a very strong bucket having lock-joint seams requiring no soldering and that all the seams are automatically formed by the act of bending and pressing the parts to shape upon the former; that all the seams are upon the inside of the bucket, leaving a smooth and regular exterior, and that the parts are held and locked in position in such a manner as to permit of their being galvanized.

In the modification Fig. 7 link T is curved in at S, and the bucket-blank is bent at the point indicated by dotted lines R, so that the side flaps E engage the link above and below the curve S and lock the bucket and link together to prevent the link sliding endwise relative to the bucket.

My invention is capable of some modification without material departure from the scope of my invention, and I do not, therefore, wish to be understood as limiting myself to the precise form and arrangement of the various parts.

Having described my invention, what I claim is—

1. A conveyer-bucket comprising a single piece of sheet metal having interengaging fins upon the bottom and side sections adapted to form seams upon the inside of the bucket, when pressed into shape.

2. A conveyer-bucket comprising a single piece of sheet metal having its edges provided

with fins adapted to automatically interengage to form the joints of the bucket, and lugs upon the inner walls of the side sections adapted to hold the fins in engagement.

5 3. A conveyer-bucket comprising a single piece of sheet metal of substantially the form shown provided with interengaging fins stamped up from its edges, said fins being adapted to automatically interengage to form
10 the seams when the bucket is pressed into shape.

4. A conveyer-bucket comprising a single piece of sheet metal made of substantially the form shown, having fins along its edges, said
15 fins being adapted to automatically form seams upon the inside of the bucket when pressed into shape.

5. A conveyer-bucket comprising a single piece of sheet metal having its edges provided
20 with fins adapted to automatically interengage to form the joints of the bucket and a ridge formed upon the inner wall of the bucket to engage the adjacent fin.

6. A conveyer-bucket comprising a single
25 piece of sheet metal having its edges provided with fins adapted to automatically interen-

gage to form the joints of the bucket, and means substantially as described for locking said fins in place to prevent the opening of the joint.

7. A conveyer-bucket comprising a single piece of sheet metal having the adjoining edges of the bottom and side sections stamped up into fins, adapted to form a lock-joint when said piece is pressed into shape.

8. A conveyer-bucket comprising a single piece of sheet metal having the upper end of the side sections and the upper end of the back section stamped up into fins, adapted to engage each other and form a lock-joint when
40 the lock-joint is pressed into form, and means for preventing the subsequent disengagement of said fins.

9. In a conveyer-bucket, a chain-link, a bucket portion having flaps adapted to be bent
45 over and engage said link, and said link having curves to prevent endwise movement thereof relative to the bucket.

LEO A. BRIGEL, JR.

Witnesses:

JAMES N. RAMSEY,

ELIZABETH J. DEMPSTER.