

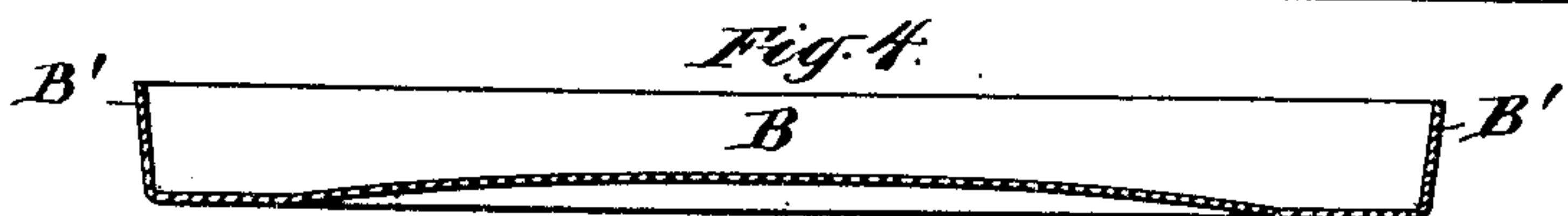
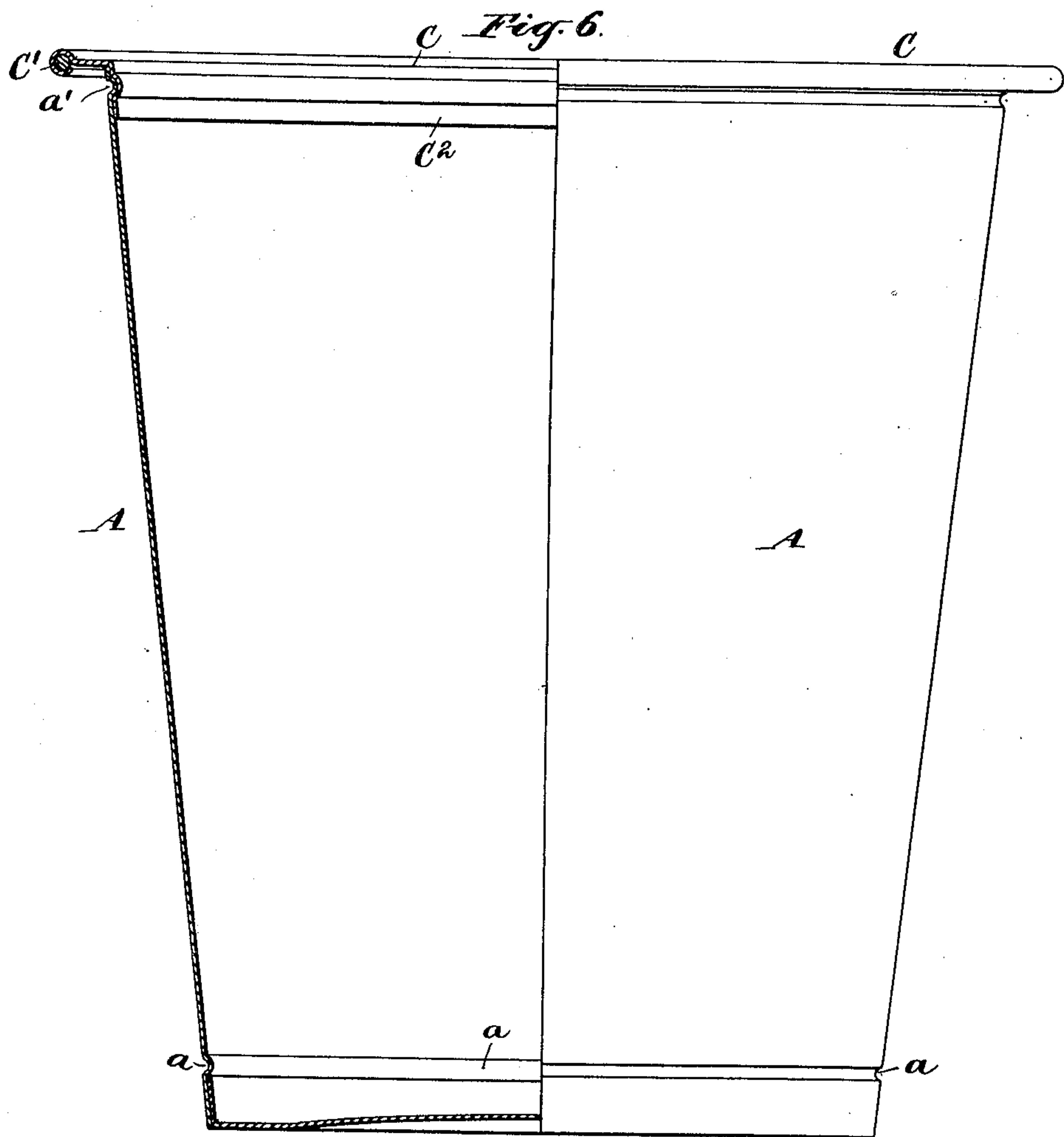
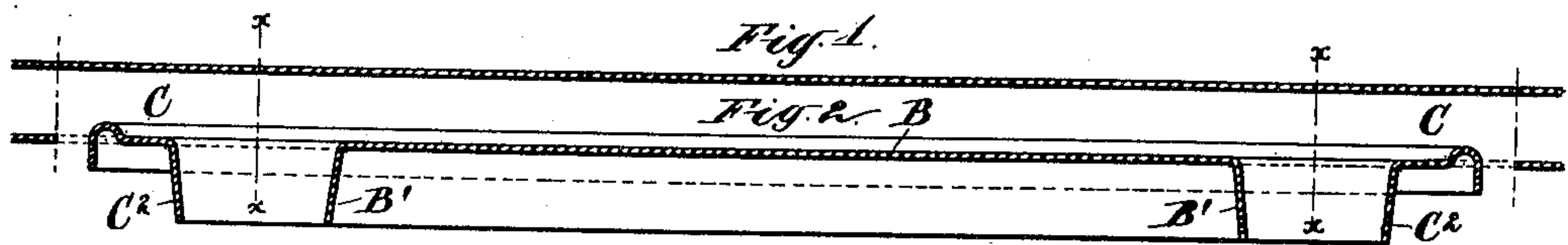
No. 885,572.

PATENTED APR. 21, 1908.

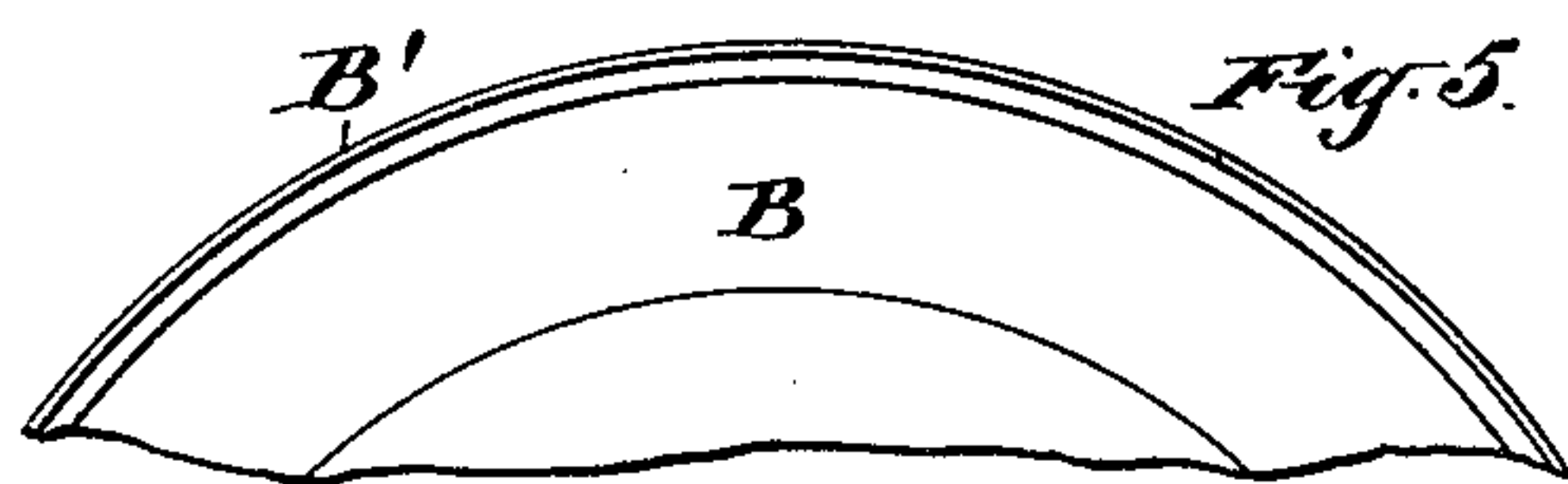
L. F. BETTS.

METHOD OF MANUFACTURING SHEET METAL RECEPTACLES.

APPLICATION FILED MAR. 12, 1907.



Witnesses:  
J. E. Eccardt.  
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Charles H. Searle.

# UNITED STATES PATENT OFFICE.

LEWIS F. BETTS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-FOURTH TO H. BLAKE GILMORE  
AND ONE-FOURTH TO JOSEPH A. KENNEDY, BOTH OF BROOKLYN, NEW YORK.

## METHOD OF MANUFACTURING SHEET-METAL RECEPTACLES.

No. 885,572.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed March 12, 1907. Serial No. 361,927.

*To all whom it may concern:*

Be it known that I, LEWIS F. BETTS, a citizen of the United States, residing in the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Methods of Manufacturing Sheet-Metal Receptacles, of which the following is a specification.

10 The invention relates to the manufacture of tapered sheet-metal vessels such as cans, pails, buckets and the like, and the object of the invention is to produce such vessels economically.

15 The invention consists in the method of forming the top-rings and bottoms of tapered sheet-metal vessels, by which the above object is attained.

The accompanying drawings form a part of this specification and show a can constructed in accordance with the invention.

Figure 1 is a section through a sheet of metal before action by the dies, and Fig. 2 is a similar view after such action. Fig. 3 is a diametric section through the top-ring before insertion in the can, and Fig. 4 is a similar view of the bottom. Fig. 5 is a plan view of a portion of the bottom. Fig. 6 is a partial side elevation and vertical section of the completed can.

Similar letters of reference indicate the same parts in all the figures.

A is the body of the can, formed of one or more pieces of sheet metal, in the form of a truncated cone.

B is the bottom and C the top-ring, each of sheet metal, formed and secured to the body as will be described.

20 The top-ring has a plane horizontally-disposed annular portion or rim, the outer margin of which is rolled under to inclose a wire C<sup>1</sup> and provide a strong rounded edge, and has a downwardly projecting flange C<sup>2</sup> tapered to match to the tapered upper portion of the body and fit snugly therein.

25 The bottom B is a disk having a flaring up-turned marginal flange B<sup>1</sup> matching to and fitting closely within the lower end of the body. Its taper holds it against passing through the smaller opening at the lower end of the body and it is held against upward movement by an annular crease or

bead *a* on the inner surface of the body immediately above the flange B<sup>1</sup> and produced after the insertion of the bottom. A similar crease or bead *a*<sup>1</sup> at the upper end locks the body and flange C<sup>2</sup> of the top-ring together.

The top-ring and the bottom are stamped from a single sheet as shown in Figs. 1 and 2; the bottom is produced without waste from the material left within the top-ring by the annular cut indicated by the dotted lines *x—x*. The portions adjacent to such cut are bent downward at the proper angle by the dies to form the flanges B<sup>1</sup> and C<sup>2</sup> and the top-ring shaped at the same time to receive the wire C<sup>1</sup>. The top-ring is then inserted in the top of the correspondingly tapered body of the can, and the bottom reversed and forced down into the lower portion of the body. The beads *a a*<sup>1</sup> are then produced and the whole preferably galvanized, the melted zinc serving not only to coat the metal but also to solder the parts together and fill the joints.

Modifications may be made in the forms and proportions.

The beads *a a*<sup>1</sup> may be omitted and the top-ring and bottom secured in place in the tapered body by soldering.

Although I have shown the flanges B<sup>1</sup> C<sup>2</sup> as of equal length, it will be understood that one may be longer than the other if found preferable.

I claim:—

1. The method of forming the top-ring and bottom for a receptacle having a tapered body from a single sheet of metal, the same consisting of cutting an annulus from said sheet and bending the inner margin thereof to form a flange matching the interior of the top of said body, and bending the outer margin of the remaining circular disk of sheet metal in the same direction to form a flange matching to the interior of the lower portion of said body.

2. The method of simultaneously forming the top-ring and bottom for a tapered vessel, which consists in cutting an annulus from a sheet of material, and bending the adjacent edges of the annulus and the remaining circular disk in the same general direction, forming converging flanges.

3. The method of simultaneously forming



the top-ring and the bottom of a tapered vessel, which consists in simultaneously cutting an annulus from a sheet of material, and bending the adjacent edges of the annulus  
5 and the circular disk remaining, in the same general direction and bending the outer margin of said disk to form an annular wire-receiving rim.

In testimony that I claim the invention above set forth I affix my signature, in presence of two witnesses.

LEWIS F. BETTS.

Witnesses:

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