

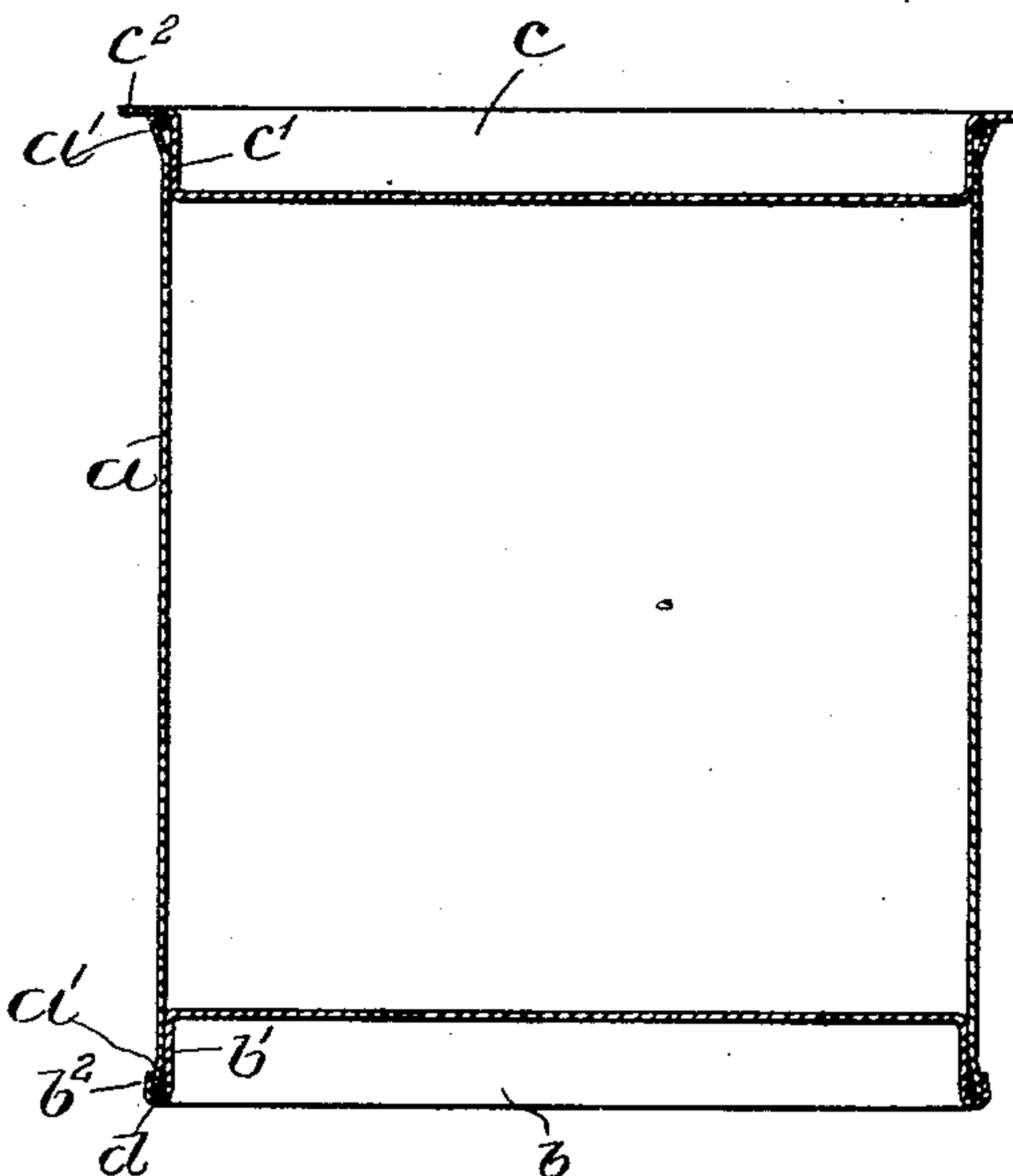
No. 737,971.

PATENTED SEPT. 1, 1903.

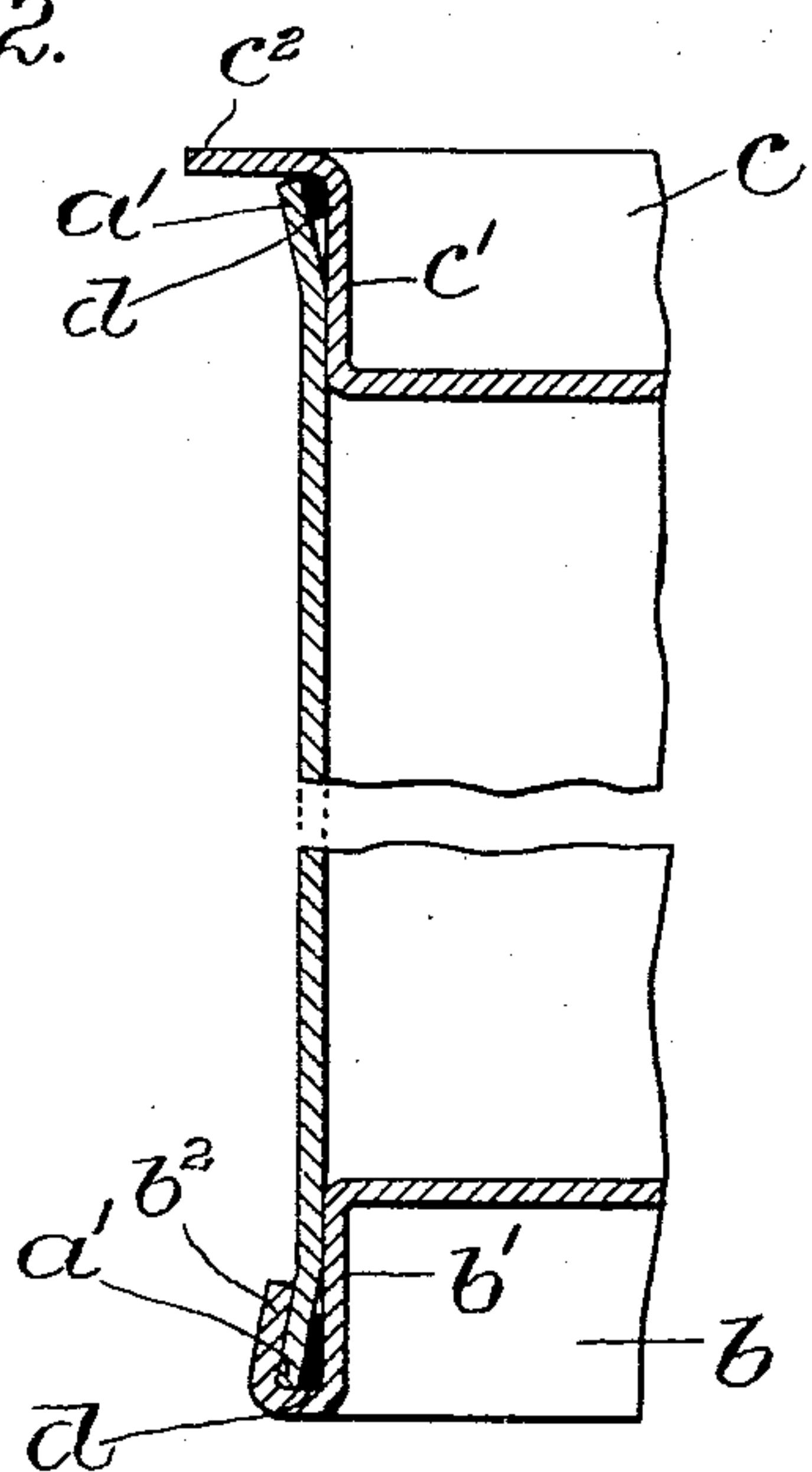
I. E. SEXTON.  
SHEET METAL CAN.  
APPLICATION FILED MAY 11, 1903.

NO MODEL.

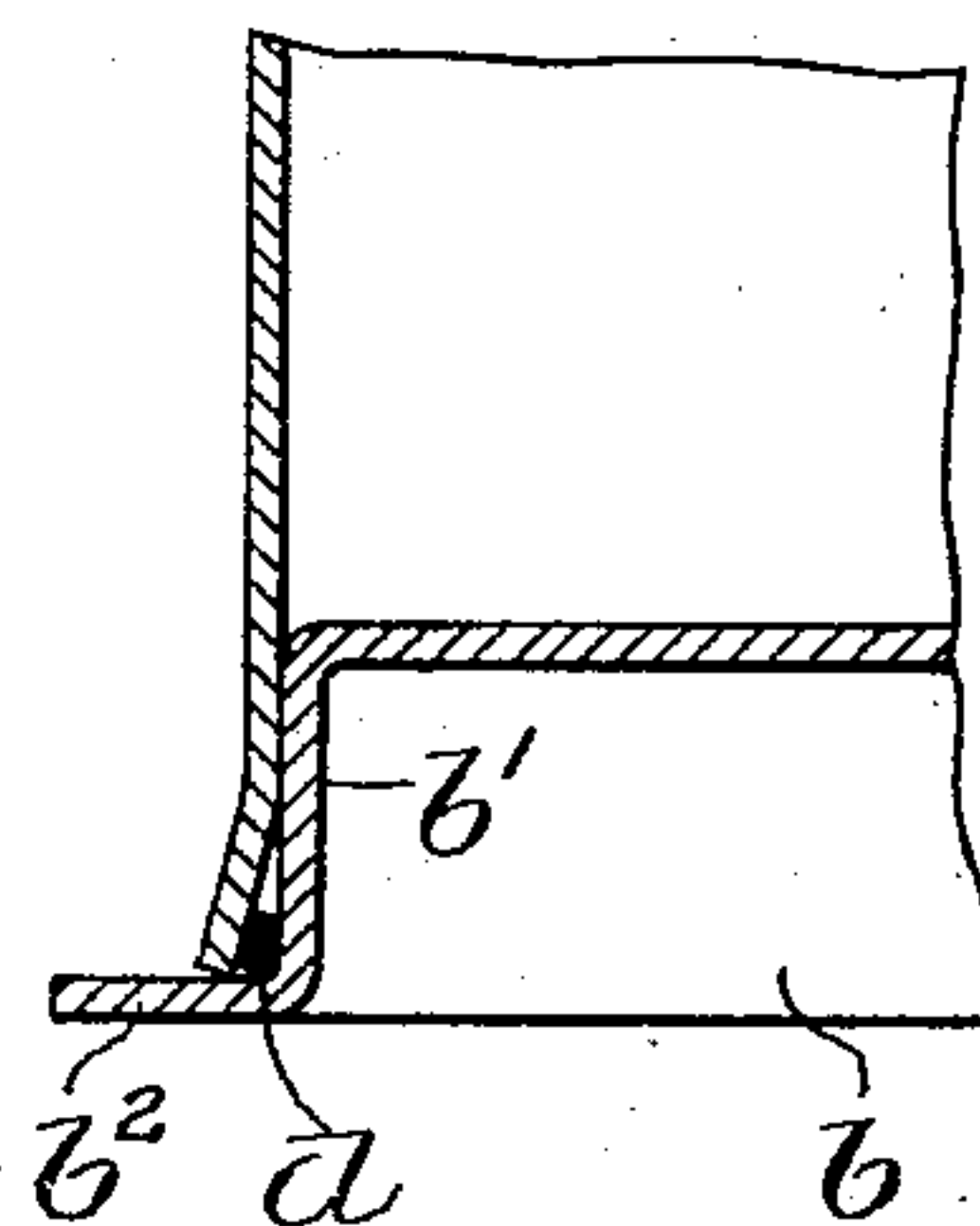
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

ISAAC E. SEXTON, OF SOMERVILLE, MASSACHUSETTS.

## SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 737,971, dated September 1, 1903.

Application filed May 11, 1903. Serial No. 156,567. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC E. SEXTON, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain  
5 new and useful Improvements in Sheet-Metal Cans, of which the following is a specification.

This invention has for its object to provide  
10 a can one or both of the end portions or heads of which can be tightly engaged with the body of the can without the use of solder, the end or head constituting the top of the can being adapted to be removed entire without cutting.

15 The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents  
20 a sectional view of a can embodying my invention. Figs. 2 and 3 represent fragmentary sectional views on an enlarged scale.

The same reference characters indicate the same parts in all the figures.

25 In the drawings, *a* represents the cylindrical body of a sheet-metal can, said body being practically of uniform diameter except at its end portions, each of which is curved or tapered outwardly to form a bell *a'*.

30 *b* represents the end piece or head forming the bottom of the can. This piece is provided with a rim portion *b'*, of cylindrical form, adapted to closely fit the interior of the body *a* above the bell *a'*. The rim portion *b* is provided with an outwardly-projecting flange *b*<sup>2</sup>,  
35 which extends across the end of the bell *a'* and is adapted to be seated thereon, the rim portion *b'*, flange *b*<sup>2</sup>, and bell *a'* forming a substantially triangular annular cavity. *d* represents a compressible washer or packing-  
40 ring inserted in the said cavity and preferably made of vulcanized rubber, although any other suitable compressible packing material may be employed. The washer *d* is formed  
45 to bear on the three sides of the said cavity and to be compressed by the movement of the flange *b*<sup>2</sup> toward the bell *a'*, the cross-sectional area of the ring being such, however, that the ring will not prevent the seating of the flange  
50 upon the end of the bell. It will be seen, therefore, that when the head *b* is pushed to place in the body *a*, the flange *b*<sup>2</sup> being seated

on the end of the bell, a tight joint will be formed by the compression of the packing-  
ring or washer, the latter being crowded 55 closely into the wedge-shaped annular space. The flange *b*<sup>2</sup> is of sufficient width to enable its outer portion to be rolled or turned upwardly against the outer side of the bell *a'*, as shown in Fig. 2, thus forming a double 60 seam. The operation of turning the flange *b*<sup>2</sup> may be accompanied by sufficient inward pressure to cause the turned-up portion of the flange to compress the bell *a'*, thus reducing the width of the annular cavity and causing 65 the packing-ring to closely fit and fill all parts of the cavity. The presence of the packing-ring between the bell and the rim portion *b'* causes the bell, even when compressed to its fullest extent, to present a slight outward in- 70 clination, so that the upwardly-turned portion of the flange *b*<sup>2</sup> is correspondingly inclined, and thus interlocked with the end of the can-body, as shown in Fig. 2.

The end or head *c*, constituting the top of  
75 the can, has a rim portion *c'* and a flange *c*<sup>2</sup>, said parts corresponding to the rim portion *b'* and flange *b*<sup>2</sup>. The operation of applying the head *c* to the body *a* is the same as that of applying the head *b* excepting that the 80 flange *c*<sup>2</sup> is not necessarily turned or rolled against the outer side of the bell, but may be left projecting, as shown in the drawings, to serve as a lip by which the head or cover *c* may be engaged and removed from the body 85 of the can.

It will be seen that the construction above described enables both of the ends or heads to be applied to the body in such manner as to form tight joints without the use of solder, 90 the top end or cover being also adapted to be readily removed.

The bell *a'* at each end of the body *a* may be made in a separate seamless piece, soldered or otherwise secured to the body instead of 95 being integral therewith.

I claim—

1. A sheet-metal can comprising a body portion of substantially uniform diameter having a bell or outward taper at its end, an end piece 100 or head having a rim extending within the body to a point below the tapered portion thereof and formed to have a tight frictional fit at its inner end with the body portion of



the interior of the can, said rim having an outwardly-projecting flange extending across the bell, and a compressible washer or packing-ring inserted in the annular cavity formed by the surfaces of said rim, flange, and bell end, said washer being formed to be compressed between said surfaces, its compression being retained by the frictional fit of the extended bearing of the rim within the body of the can.

2. A sheet-metal can comprising a body portion of substantially uniform diameter having a bell or outward taper at its end, an end piece or head having a rim extended within the body and formed to closely fit the body portion of the interior of the can below the tapered

portion thereof, said rim having an outwardly-projecting flange extending across the bell and turned upwardly against the outer side of the bell, and a compressible washer inserted in the annular cavity formed by the rim, flange, and bell, said bell and washer being compressed by the turned portion of the flange.

In testimony whereof I have affixed my signature in presence of two witnesses.

ISAAC E. SEXTON.

Witnesses:

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