

(No Model.)

A. S. LAMBERT.  
CAN CLOSURE.

No. 587,486.

Patented Aug. 3, 1897.

FIG. 1.

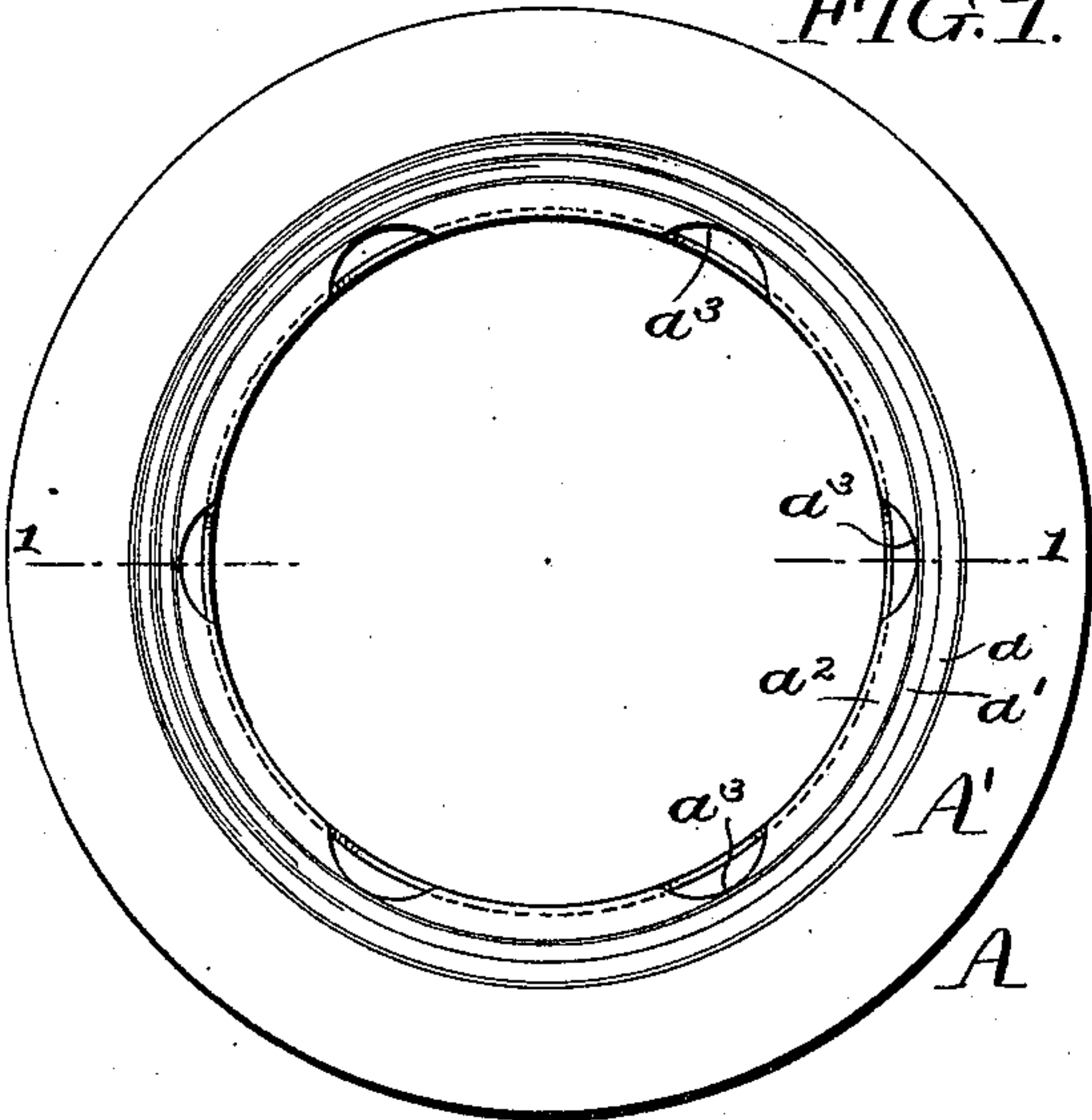


FIG. 3.

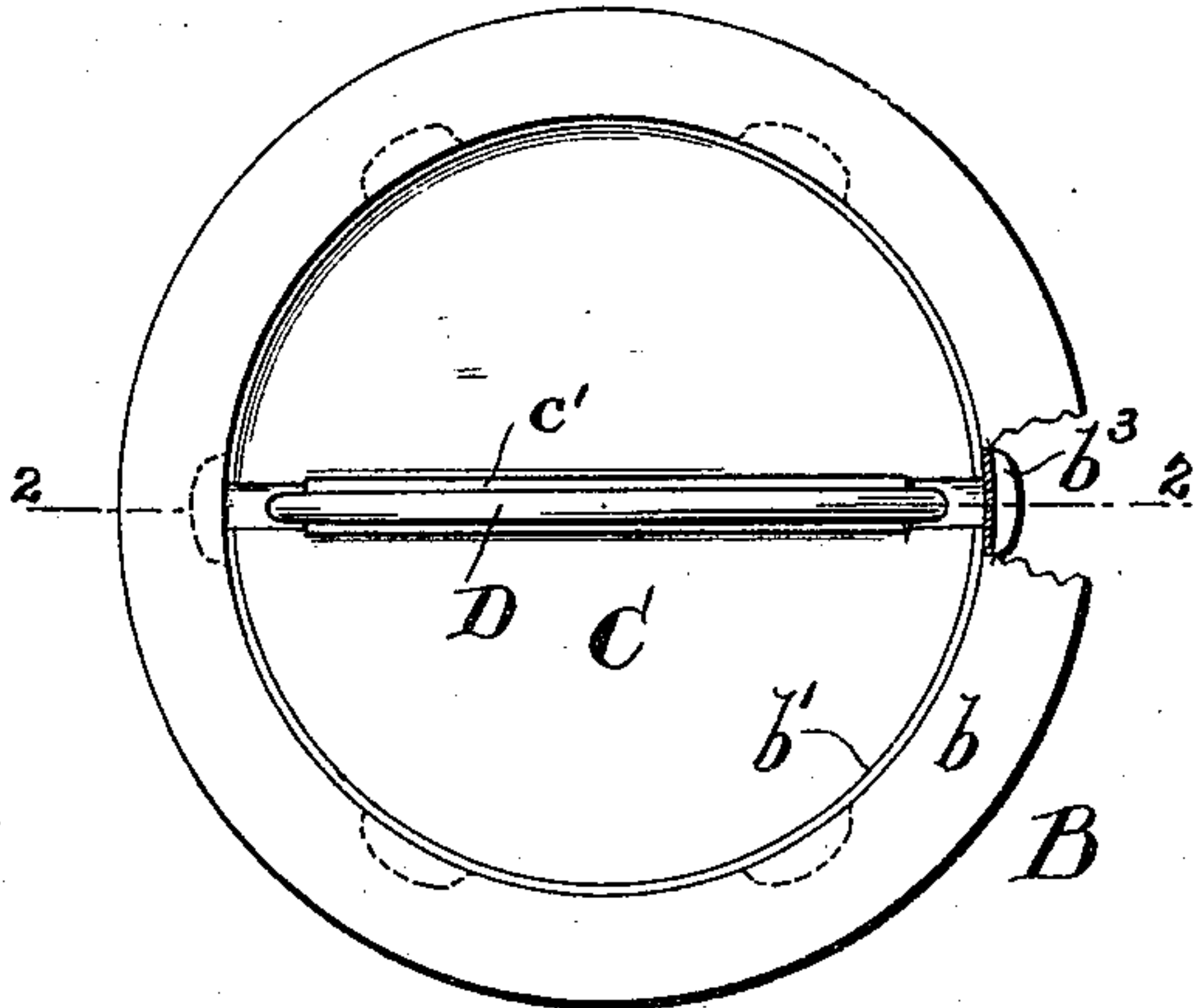


FIG. 2.

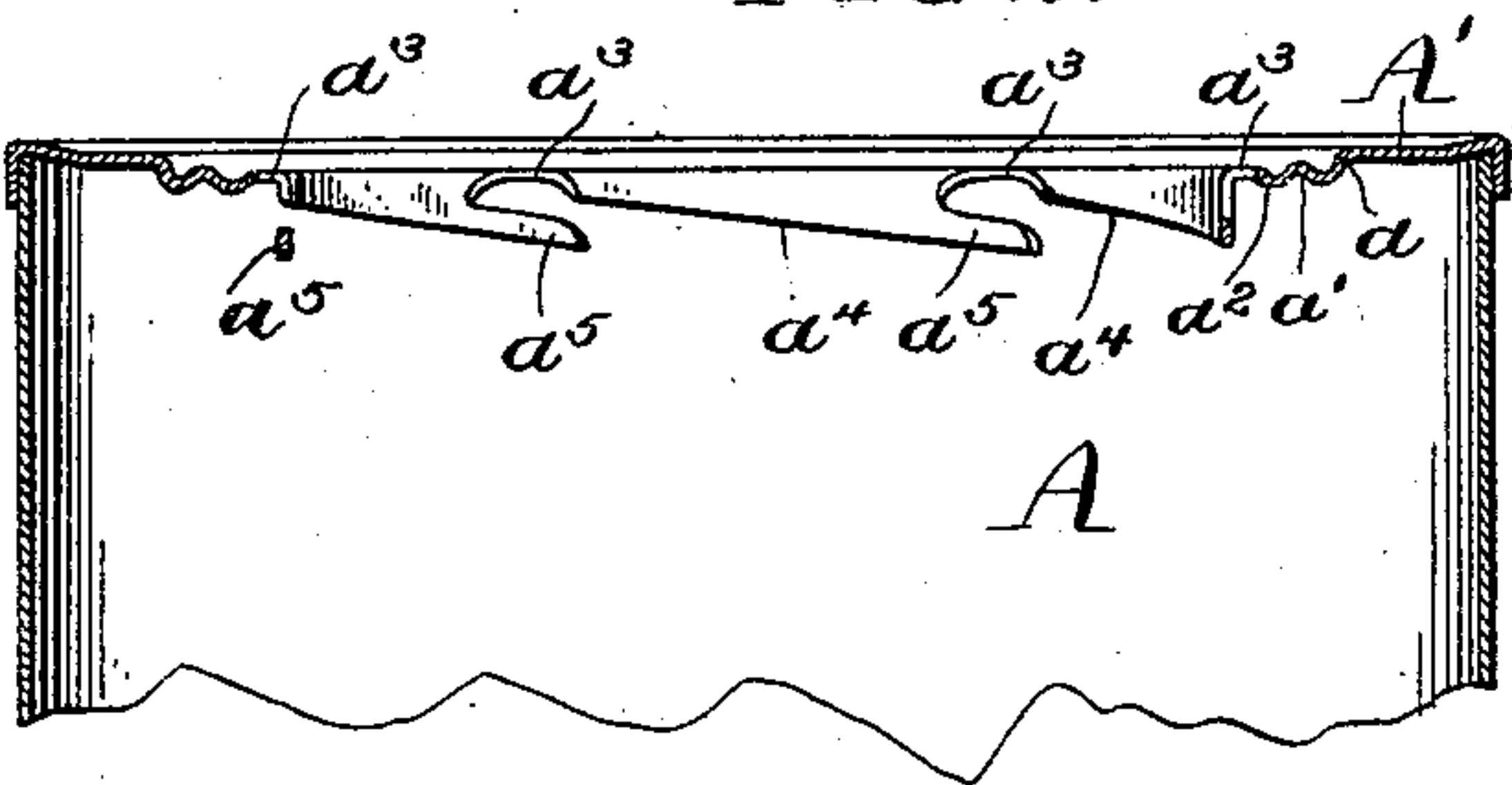


FIG. 4.

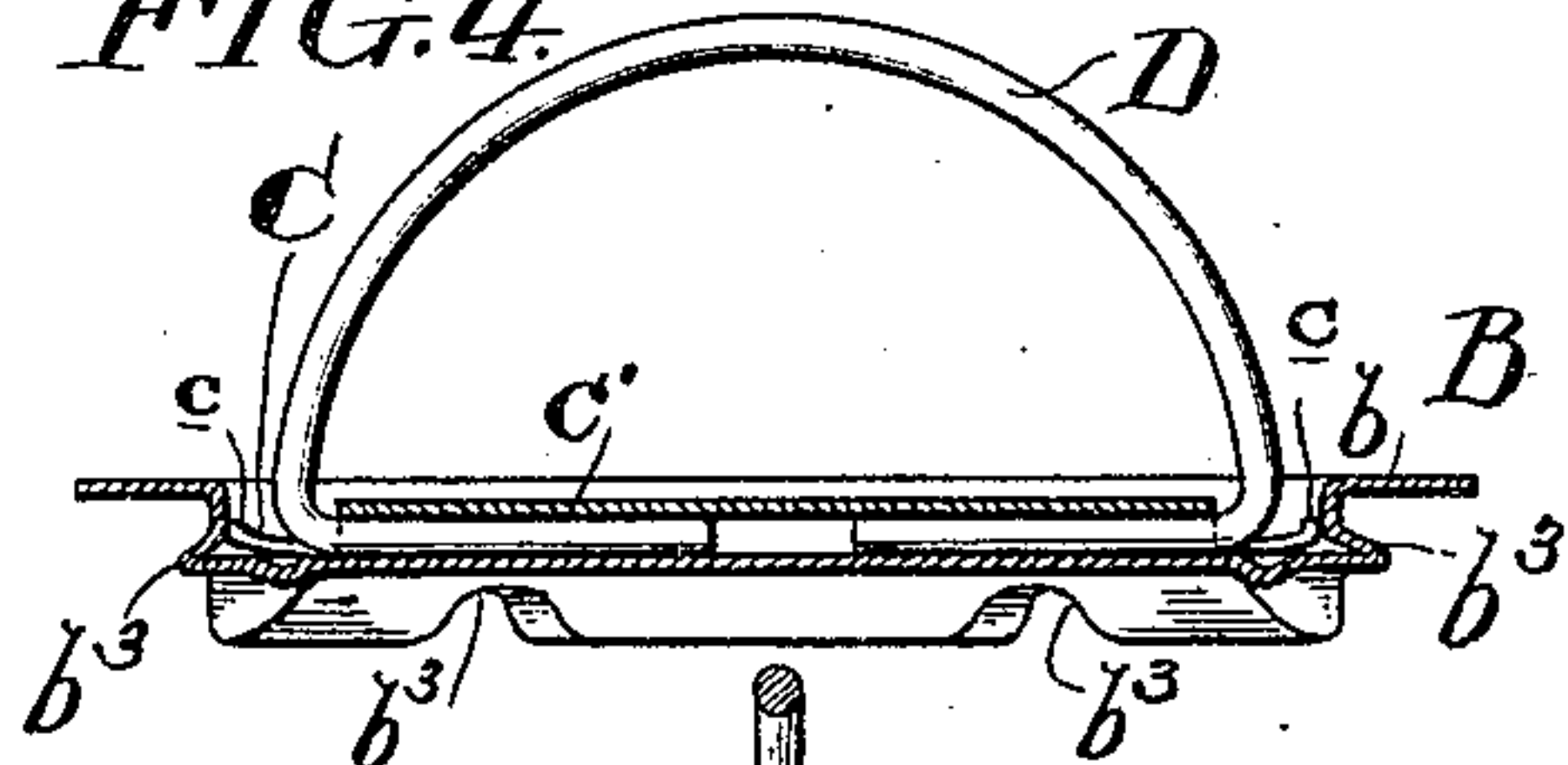


FIG. 5.

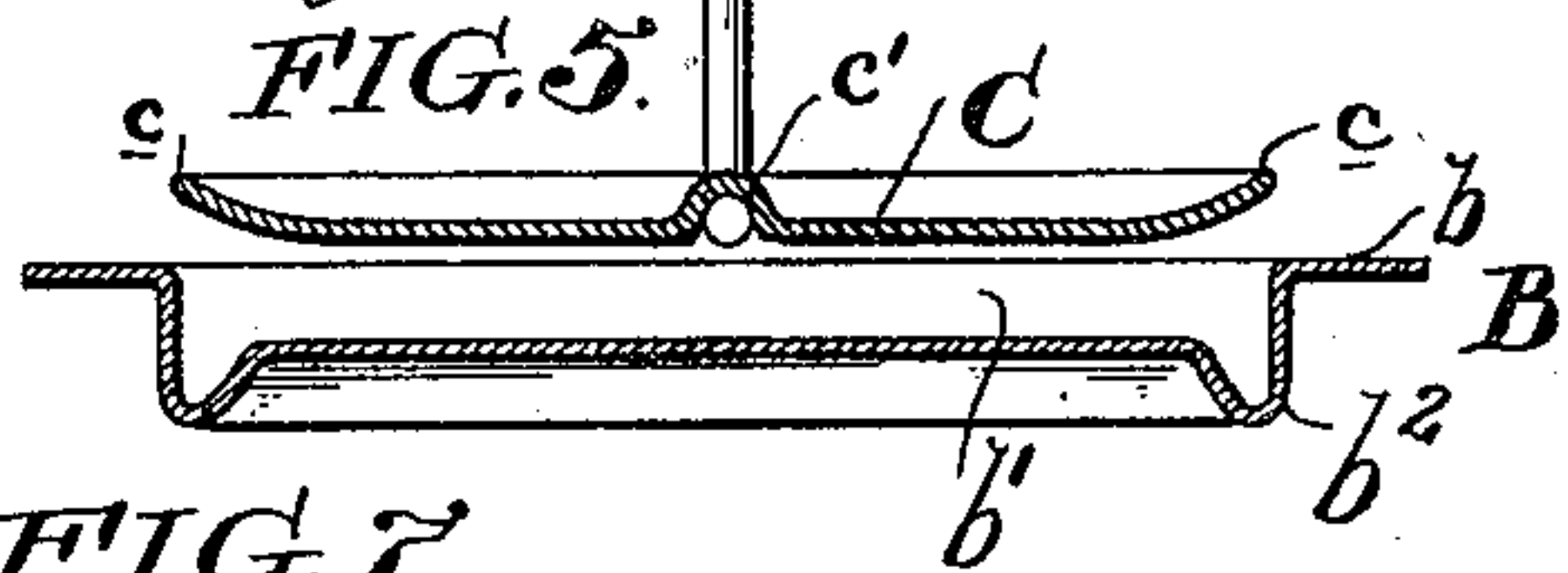


FIG. 9.

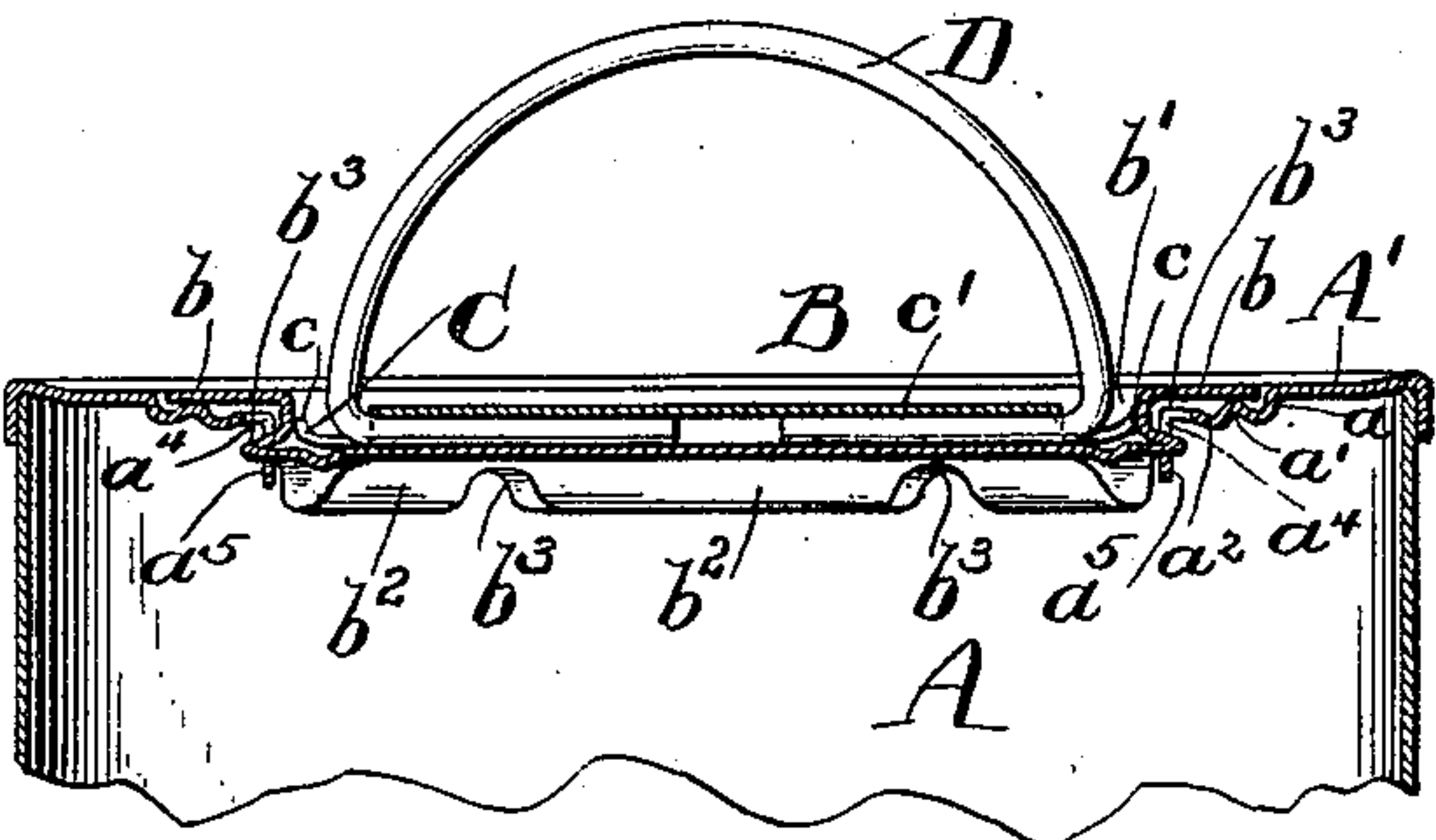


FIG. 7.

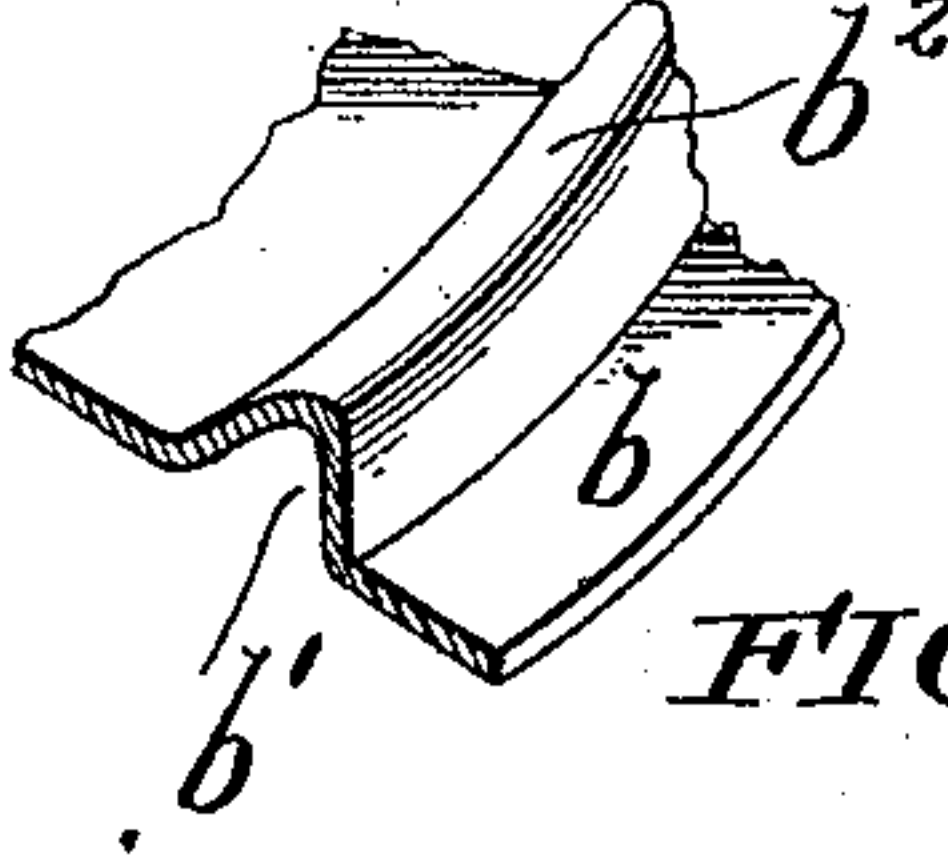


FIG. 8.

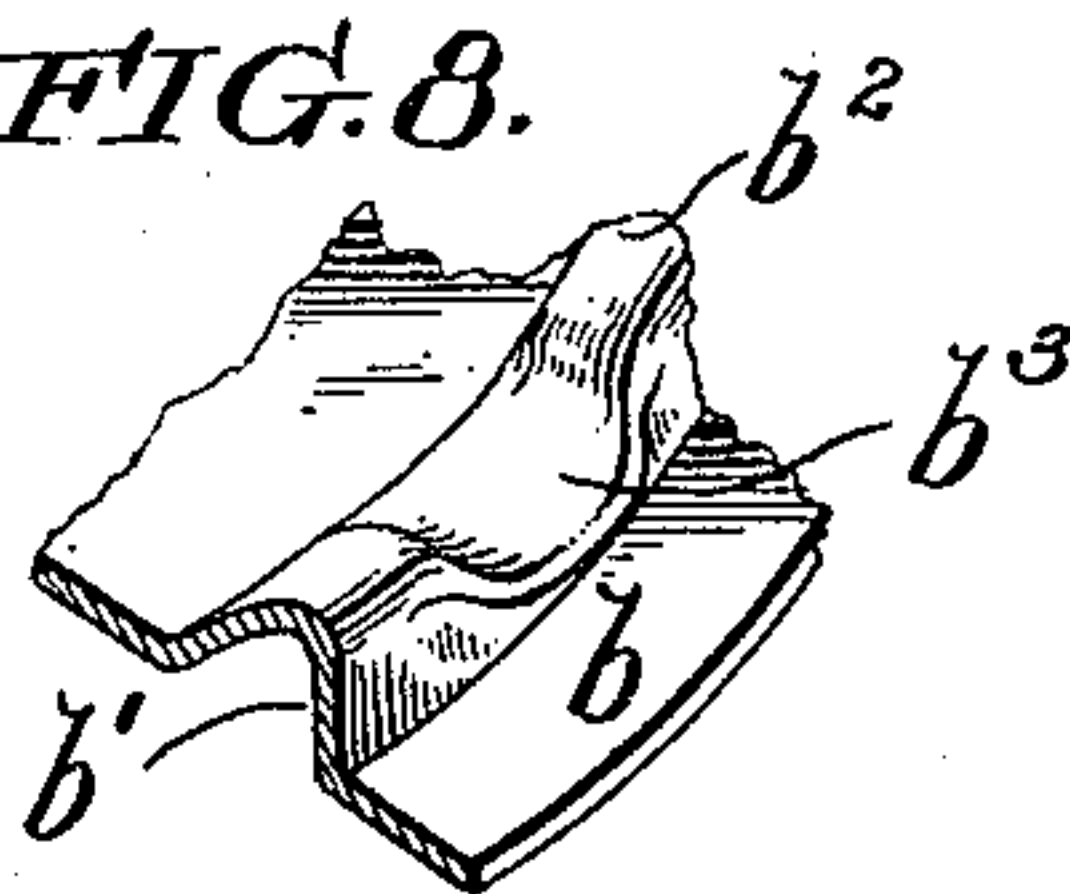
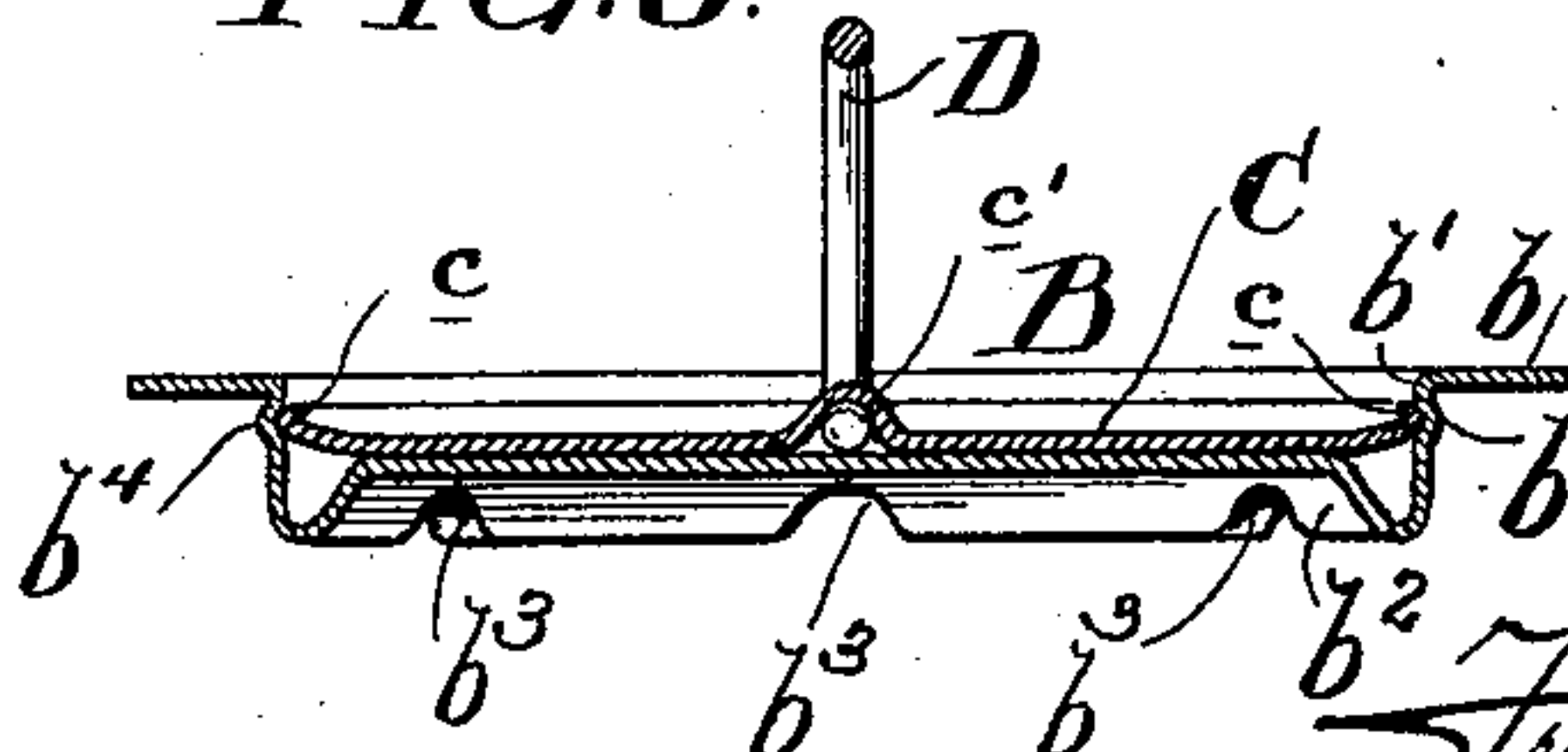


FIG. 6.



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by his atty.  
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# UNITED STATES PATENT OFFICE.

ALBERT S. LAMBERT, OF BRIDGETON, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE PRACTICAL CLOSURE COMPANY, OF SAME PLACE.

## CAN-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 587,486, dated August 3, 1897.

Application filed February 16, 1893. Serial No. 462,601. (No model.)

*To all whom it may concern.*

Be it known that I, ALBERT S. LAMBERT, a citizen of the United States, residing at Bridgeton, in the county of Cumberland, in the State of New Jersey, have invented a certain new and useful Improvement in Can-Closures, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to devices for closing the openings in cans or similar receptacles, and has for its object to provide a simple, efficient, and economical closing device.

The nature of my invention will be best understood as described in connection with the drawings, in which—

Figure 1 is a top view of a can-head; Fig. 2, an elevation of the can on line 1 1 of Fig. 1. Fig. 3 is a top view of the can top or lid partly broken away to show the lug  $b^3$ . Fig. 4 is a section on line 2 2 of Fig. 3. Fig. 5 shows the parts making up the lid or top before they are united and the lugs  $b^3$  formed. Fig. 6 is a similar view showing the parts of the top united. Figs. 7 and 8 are the perspective views showing the method of forming the lugs  $b^3$ , and Fig. 9 a sectional elevation showing the lid in place on the can.

A is the can, and A' the top thereof. This top I form with a depressed head  $a'$  by in the case shown first pressing down the metal of the top, as shown at  $a$ , then in this depressed flange forming the bead  $a'$ , so that its top will lie below the level of the top A' and continuing the flange inside the bead at a lower level, as shown at  $a^2$ . This corrugated formation of the flange is not only useful for the purposes hereinafter described, but also gives stiffness to the inside rim of the can-top surrounding the opening formed therein. The edge of the top is bent down, as shown, and so cut as to form wedges  $a^4$ , which extend between notches  $a^3$ , cut in the rim part  $a^2$  and preferably running to the bead  $a'$ , as shown, and preferably I form wedge extensions  $a^5$  by prolonging the broader ends of the wedges  $a^4$  so that they will extend below the notches  $a^3$ , as shown. As shown, the can-top is formed of sheet metal, and the corrugated construction of the top of course relates particularly

to such material, as does also the springy action of the portion of the flange  $a^2$  between the notches  $a^3$ , to be hereinafter described, and the best construction of which requires five or more equidistant notches, so as to make each flange-section a springy tongue; but the feature of construction, which consists in the combination, with the notches, of a wedge, as  $a^4$ , extending away from its edge, and a wedge, as  $a^5$ , extending below its edge, is, I believe, new in any material.

B is the can lid or closure, which I form of sheet metal, first striking it up, as shown in Figs. 5 and 7, so as to give it a flange  $b$ , a depressed center  $b'$ , adapted to enter the opening in the can-top, and a bead  $b^2$  at the edge of the center, which is preferably formed with an abrupt outer side and a more gradually slanting inner side, as shown. The can-top proper is formed from this blank by pushing out lugs  $b^3$  from the metal of the bead  $b^2$ , as shown in Fig. 8, the form of the bead greatly facilitating this. It is desirable in many cases that a bail, as D, should be attached to the lid, and to secure it in place I prefer to use a bail-plate C, having a seat  $c'$  to engage the ends of the bail, and I form this plate C so that its edges  $c$  will fit closely in the depressed center of the lid B, making it indeed slightly larger, so that it requires force to push it into the center  $b'$ , and I then seat the said plate by a die, preferably the same one used to throw out the lugs  $b^3$ , pressing the edges  $c$  so tight against the walls of the center  $b'$  that they will grip and hold. This is illustrated with some exaggeration in Fig. 6 at  $b^4$ .

The uses of the devices described are obvious. The lugs  $b^3$  of course correspond in number and arrangement with the notches  $a^3$  and are shaped to enter said notches when the lid is placed on the can-top with its flange  $b$  resting on the top of the depressed bead  $a'$ , so that the lid will be flush with the can-top. The lid is then turned so that the lugs will run under the wedges  $a^4$ , thus drawing the lid down and pressing the rim  $b$  against the bead  $a'$  or a gasket placed between them. When it is desired to open the can, I turn the lid in the opposite direction, and then the under sides of the lugs  $b^3$  ride up on the



wedges  $a^5$ , assisting in lifting the lid from its seat on the can-top. The flange  $a^2$  is placed at a lower level than the top of bead  $a'$ , so that the lid shall bear solely against said bead, 5 but in case of contact the springy nature of the parts making up rim  $a^2$  permit it to readily yield under pressure, and this same springy quality permits it to yield somewhat to the upward pressure of the lugs, so that 10 if by reason of defective work one, or more, wedge or lug is not symmetrically placed with respect to the others the yielding of the rim will equalize the defects and insure a uniform bearing all around.

15 The closure or lid shown or described in my present application forms in its principal features the subject-matter of my former application for Letters Patent, filed August 25, 1892, Serial No. 444,098, except that the construction and mode of attachment of the bail-piece C illustrated and described in the present case is novel.

Having now described my invention, what I claim as new, and desire to secure by Letters 25 Patent, is—

1. A can having an opening therein, notches  $a^3$  arranged at intervals around the edge of said opening an inclined wedge  $a^4$  extending obliquely downward and away from each

notch on one side and a corresponding wedge 30  $a^5$  extending beneath each notch in the same direction in combination with a can-closure having a flange adapted to rest on the edge of the can-opening, a depressed center adapted to enter said opening and lugs extending out 35 from said center adapted to enter the notches and engage the wedges.

2. A sheet-metal can-head having an opening, notches  $a^3$  formed in the edge of the spring and downwardly-extending wedge-shaped 40 flanges  $a^4 a^5$  formed between said notches each having a portion  $a^5$  extending below the adjacent notch at one side in combination with a can-closure having lugs adapted to enter the notches and engage the flanges  $a^4 a^5$  substantially as and for the purpose specified. 45

3. A sheet-metal closure B having a flange  $b$  adapted to lie on a can-top, a depressed center  $b'$  adapted to enter an opening therein and outwardly-extending lugs  $b^3$  formed integral 50 with the closure by pushing out the sheet metal at the lower edge of the center  $b'$  in combination with a sheet-metal bail-plate C clamped in the walls of the depressed center.

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Witnesses:

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