

No. 829,638.

PATENTED AUG. 28, 1906.

W. H. DODGE.  
CAP OR COVER FOR RECEPTACLES.  
APPLICATION FILED NOV. 25, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

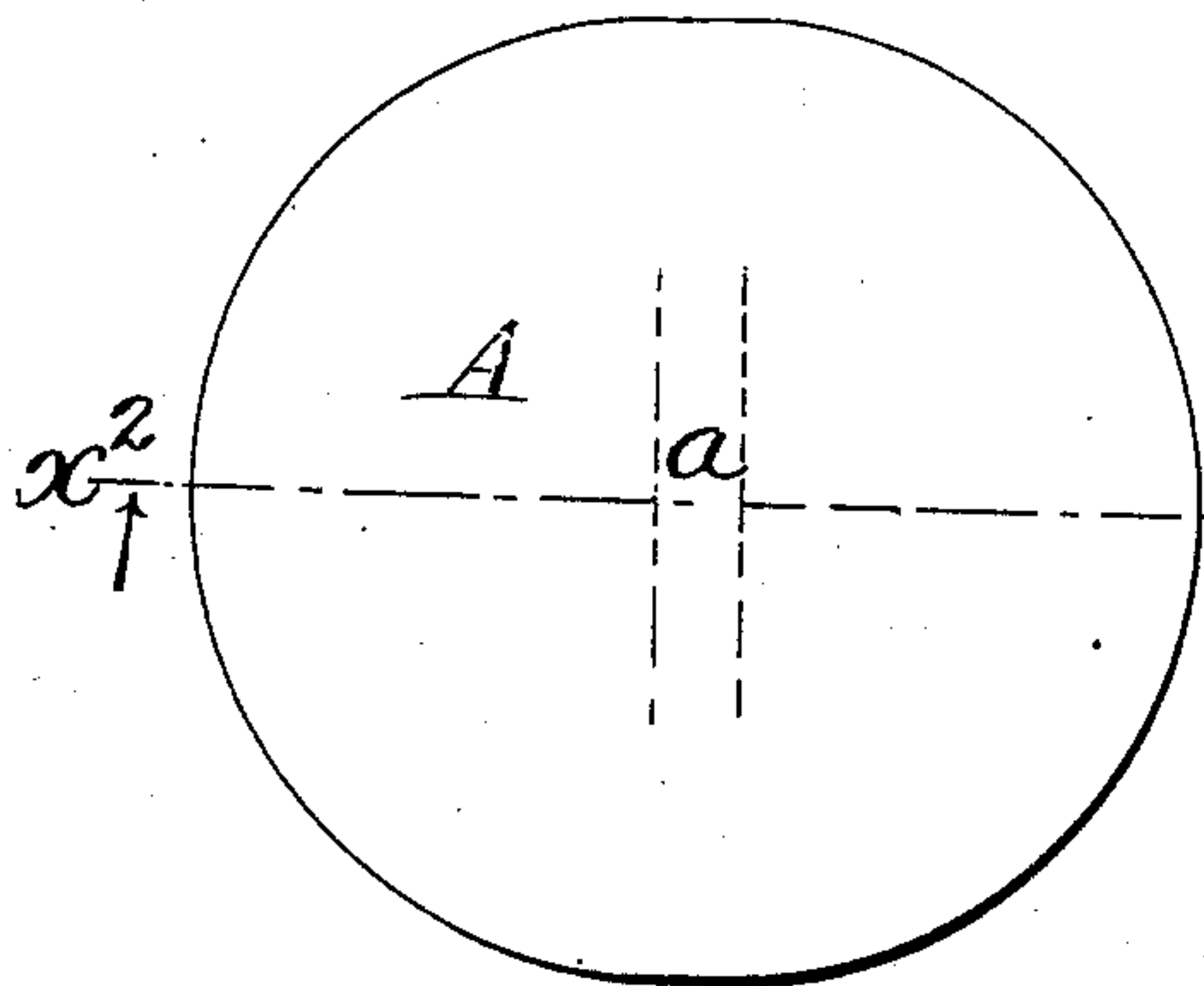


Fig. 3.

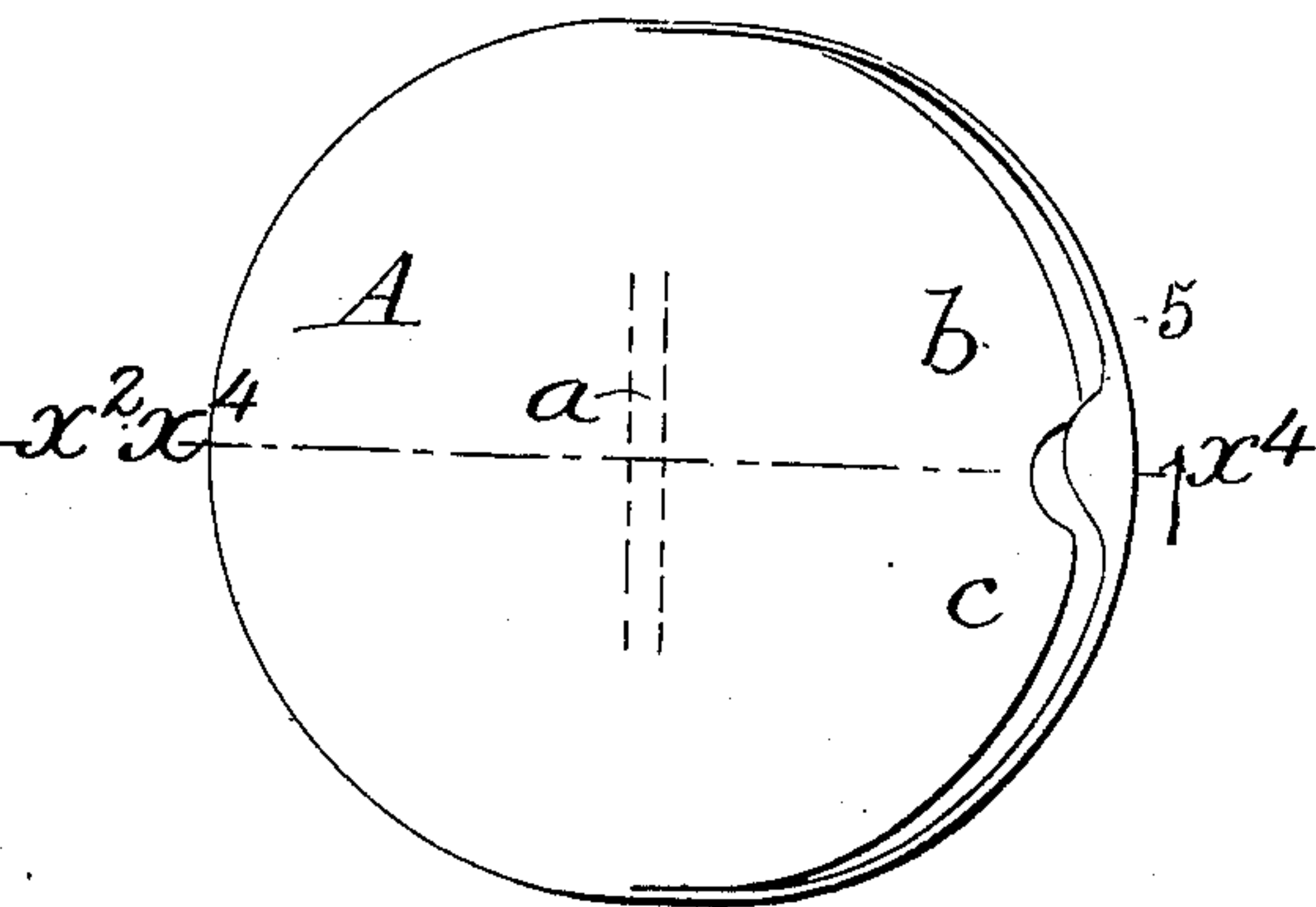


Fig. 2.

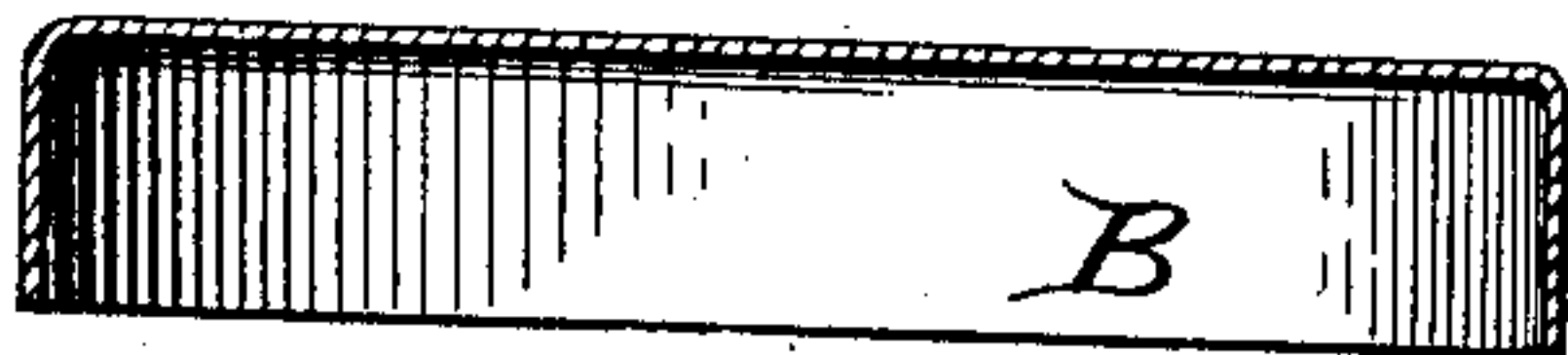


Fig. 4.

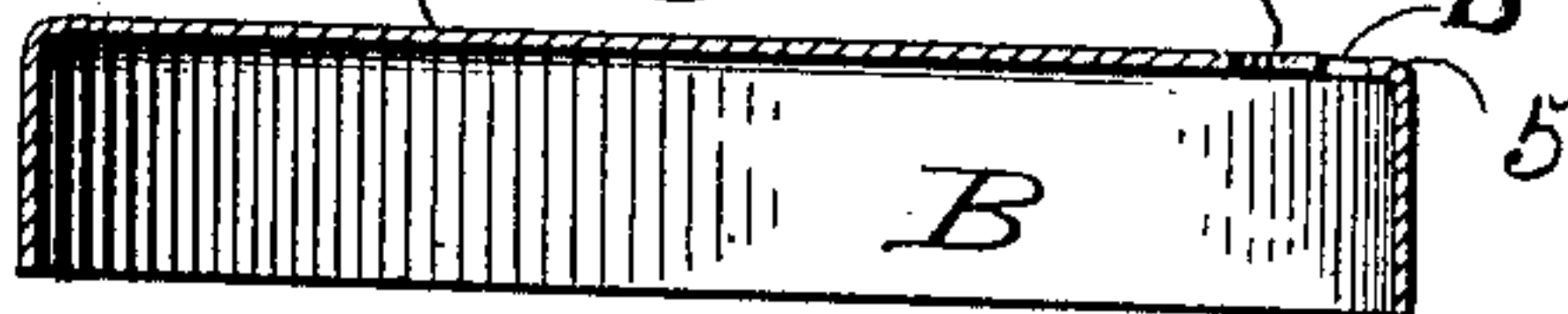


Fig. 5.

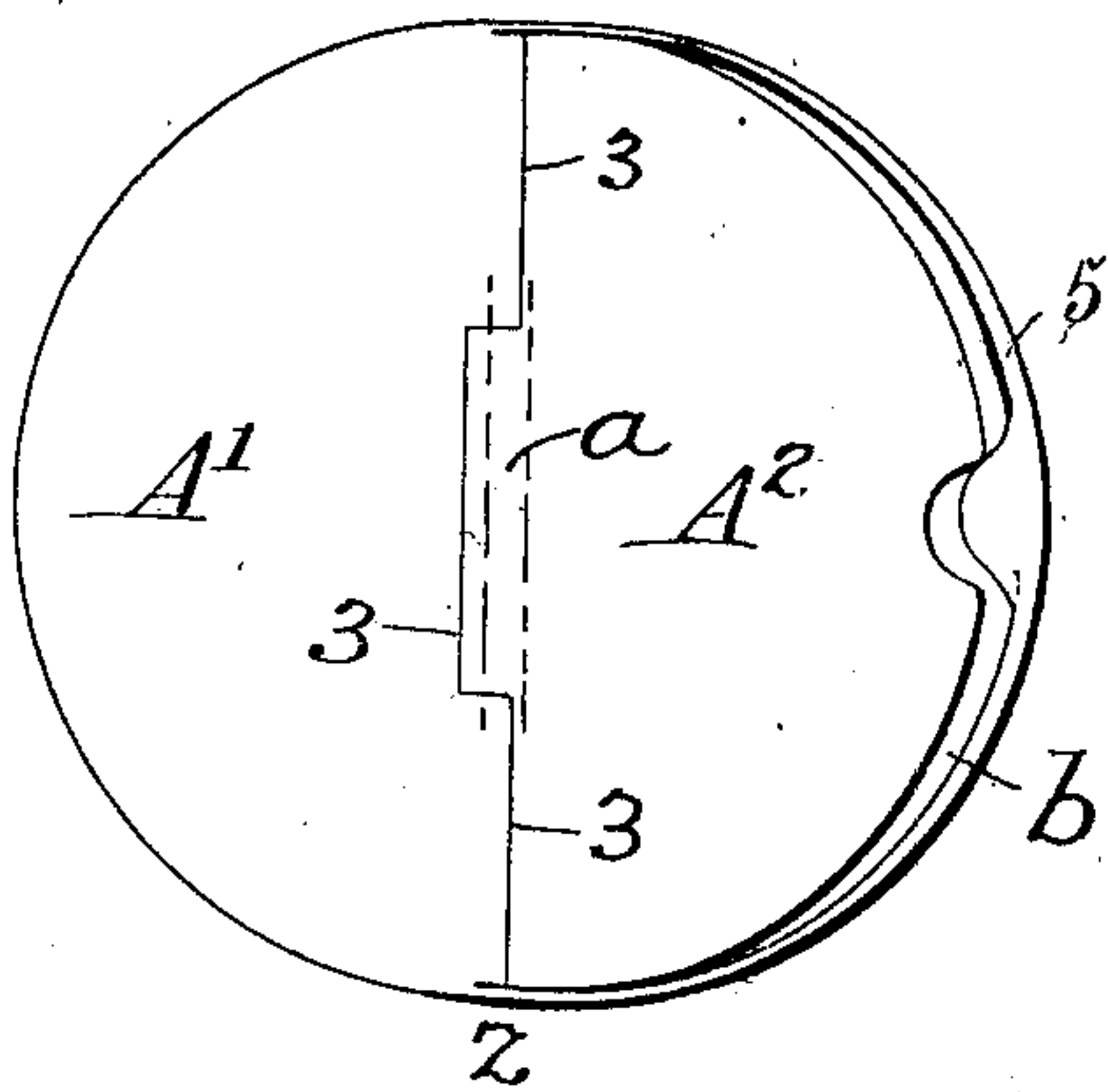


Fig. 6.

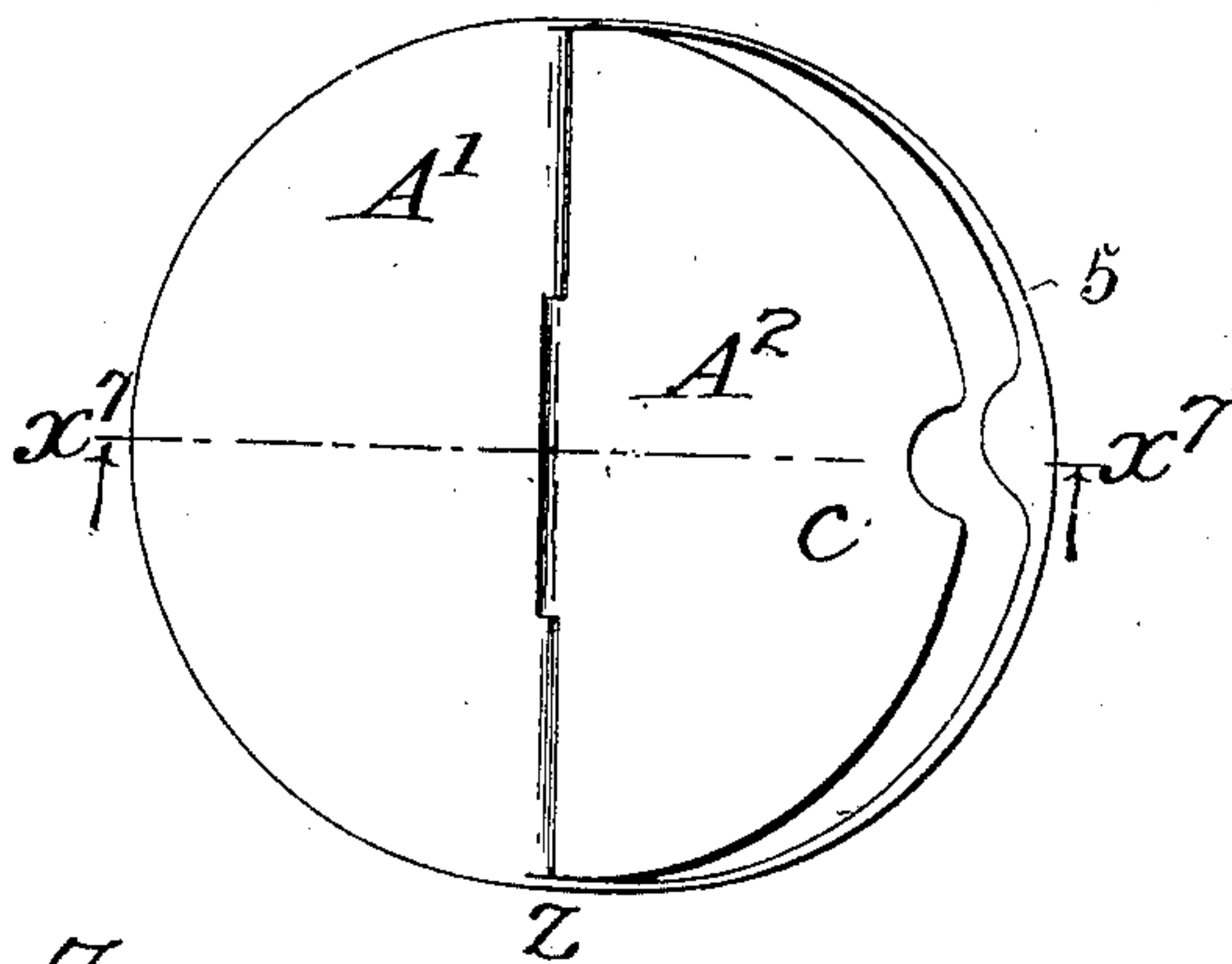
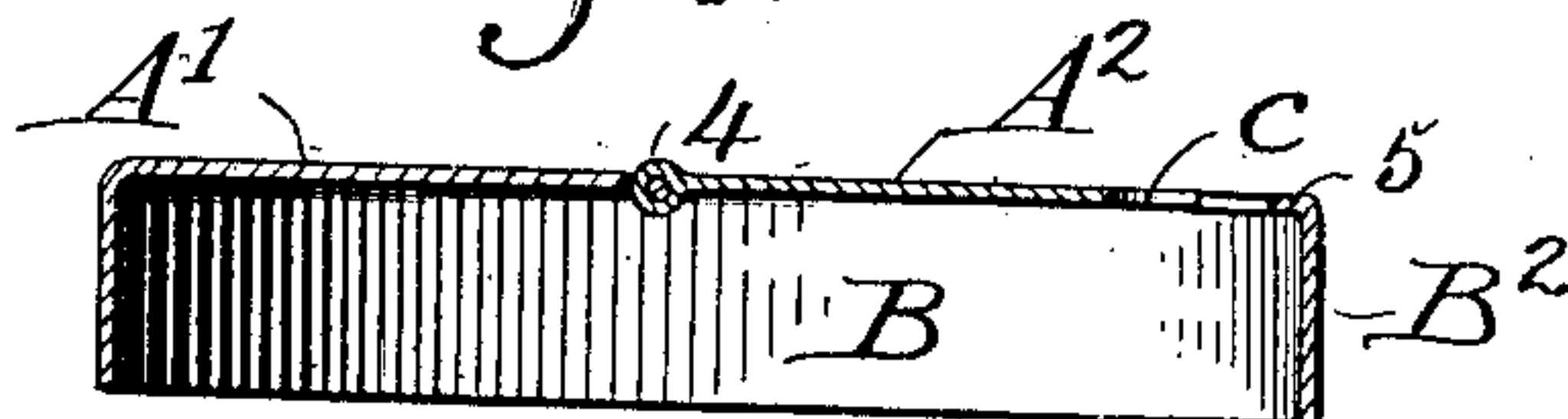


Fig. 7.



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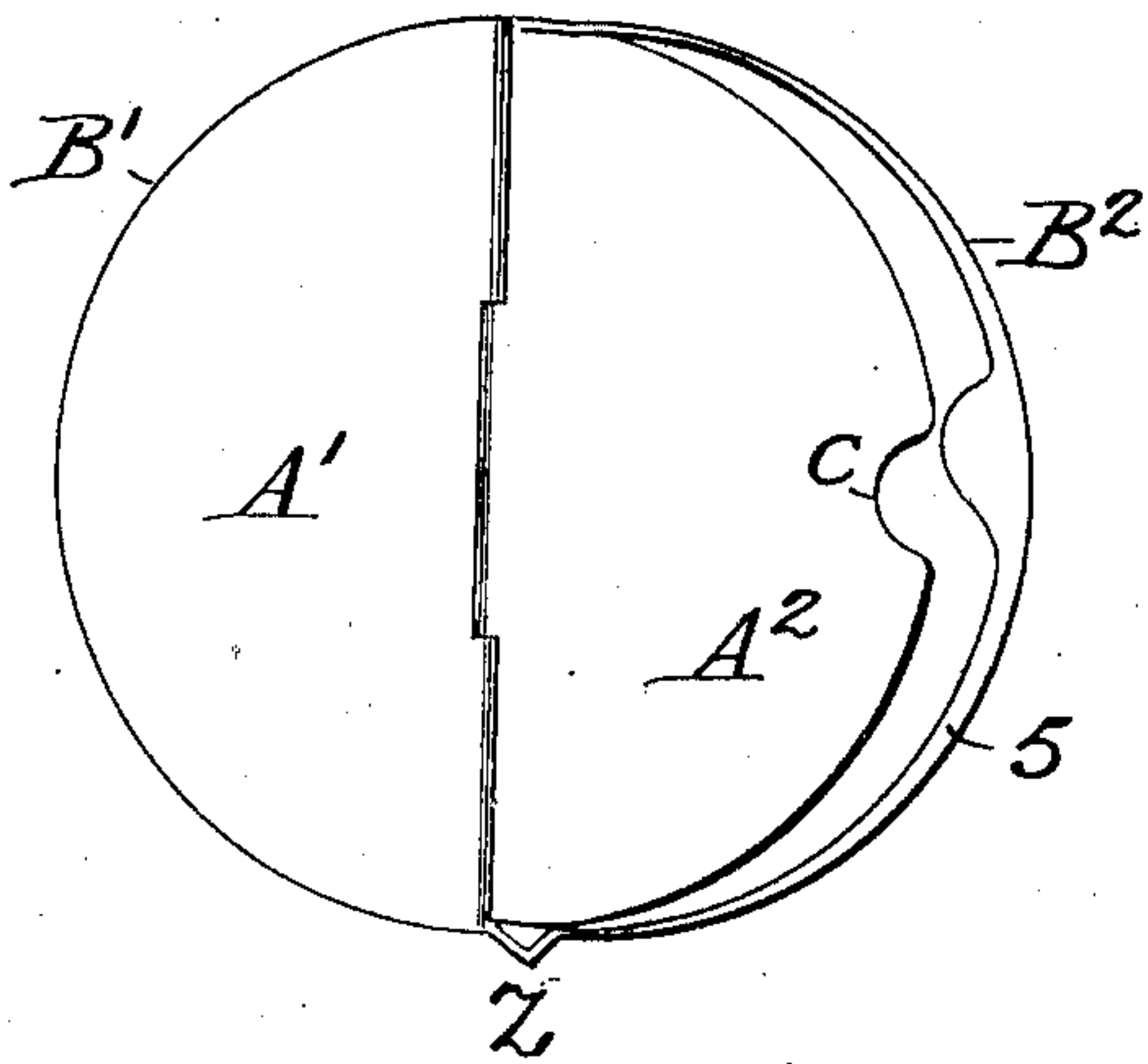
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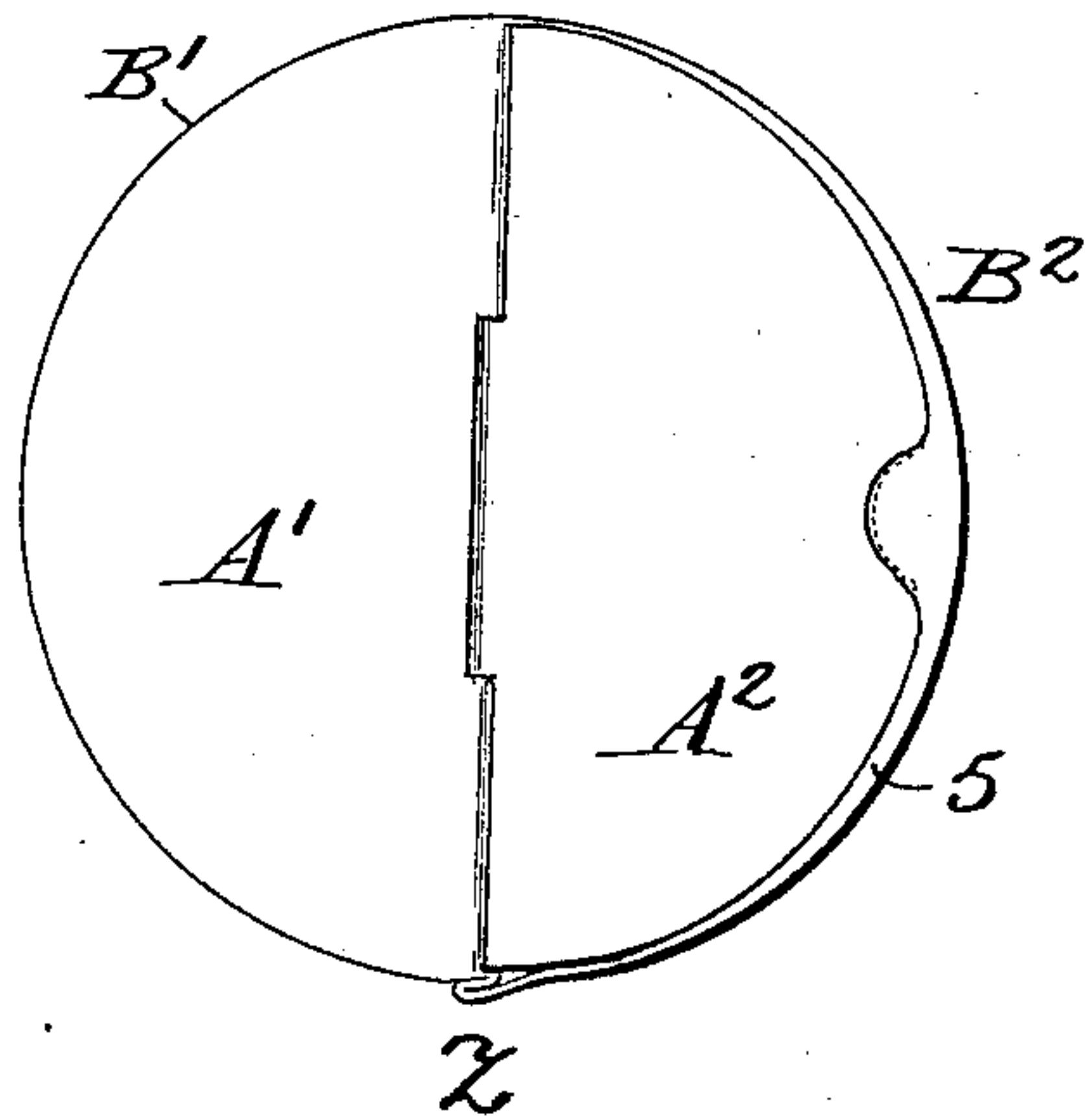
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2 SHEETS—SHEET 2.

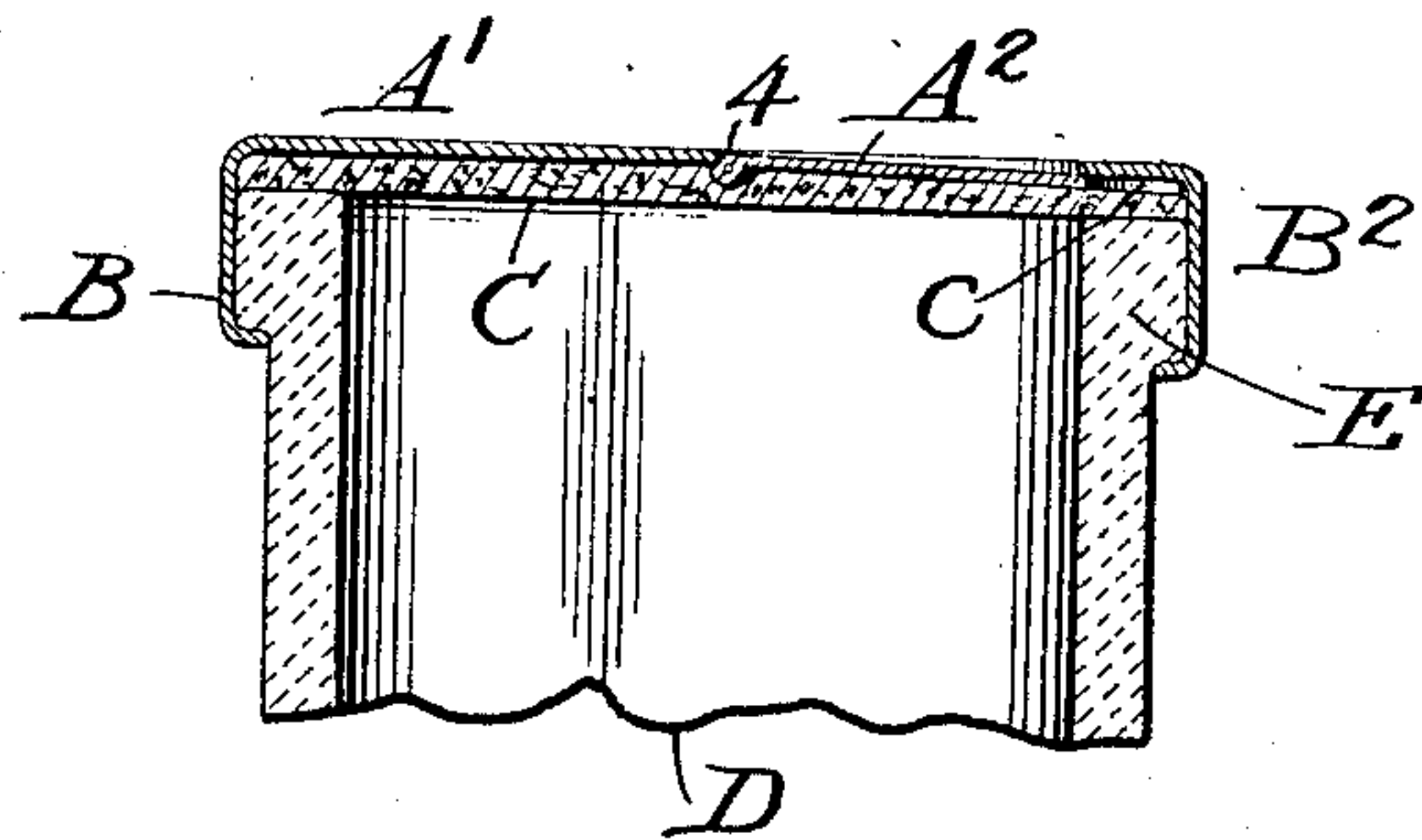
*Fig. 8.*



*Fig. 9.*



*Fig. 10.*



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# UNITED STATES PATENT OFFICE.

WILLIAM H. DODGE, OF MONTCLAIR, NEW JERSEY.

## CAP OR COVER FOR RECEPTACLES.

No. 829,638.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed November 25, 1905. Serial No. 289,113.

*To all whom it may concern:*

Be it known that I, WILLIAM H. DODGE, a citizen of the United States, residing in Montclair, Essex county, New Jersey, have invented certain new and useful Improvements in Caps or Covers for Receptacles, of which the following is a specification.

This invention relates to caps or covers for receptacles.

10 The object of the invention is to provide a cap or cover for cans, jars, bottles, and similar receptacles which is simple, efficient, and economical.

15 A further object is to provide a cap or cover for the purpose stated made from a single piece of material and having the base or top thereof formed with a hinged or pivoted section.

20 Other objects of the invention will appear more fully herein.

The invention consists, substantially, in the construction, combination, location, and arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

Referring to the accompanying drawings and to the various views and reference-signs appearing thereon, Figure 1 is a top plan view of a blank or shell from which the cap or cover embodying my invention is to be made. Fig. 2 is a section of the same on the line  $x^2 x^2$  in Fig. 1. Fig. 3 is a view similar to Fig. 1, showing the blank or shell after the next step in the manufacture or production of the completed cap or cover. Fig. 4 is a section of the same on the line  $x^4 x^4$  in Fig. 3. Fig. 5 is a view similar to Figs. 1 and 3, showing the hinge cuts made in the shell or blank in the next step in the operation. Fig. 6 is a similar view showing the shell after the hinges are formed. Fig. 7 is a section on the line  $x^7 x^7$  in Fig. 6. Fig. 8 is a view similar to Fig. 6, showing a partly-completed fold in the flange. Fig. 9 is a similar view showing the fold in the flange completed and the cap finished. Fig. 10 is a view in section, showing a cap or cover completed and applied to a jar, can, bottle, or the like.

50 In the manufacture and use of caps or covers for jars, cans, bottles, or the like it is sometimes desirable to provide means for gaining access to the interior of the bottle, jar, can, or other receptacle without removing the cap or cover therefrom.

It is among the special purposes of my

present invention to provide a cap or cover possessing this characteristic and which at the same time is simple, inexpensive to manufacture, and efficient in use.

60 In carrying out my invention in one form of embodiment thereof and the best form in which I at present contemplate carrying my invention into practical operation, but to which, however, my invention is not to be limited or restricted, a sheet or plate of suitable material, preferably metallic—as tin, for instance—and of the desired shape or dimensions, is formed into a blank shell, as shown in Figs. 1 and 2, having a base or top 70 A and a depending peripherally-continuous flange B, formed integrally therewith. In practice the blank or shell when formed is not truly cylindrical, but is preferably somewhat oblong, although ultimately intended 75 for use upon a bottle, can, jar, or the like having a cylindrical neck or mouth to be reduced to the desired cylindrical shape by the manipulations necessary to complete the cap or cover as a finished article.

80 The dotted lines indicated at  $a$  in Fig. 1 represent a rectangular area midway the longest diameter of the shell and determine the extent of the oblong or oval shape of the shell. The extent of this rectangular area is 85 dependent upon the extent of material to be subsequently removed from the shell in the production of the finished cap, and therefore may be varied according to the area of the material to be removed, as will appear more 90 fully hereinafter.

95 From the oblong or oval shaped base or top A of the shell, and preferably along the edge of longest diameter thereof, is removed a strip, (indicated at  $b$  in Figs. 3, 4, and 5 and preferably of crescent shape, as clearly shown.) This strip may be removed by punching or cutting through the base or top A in any suitable or convenient manner, which punching or cutting may be effected 100 either before, at the same time with, or subsequently to the formation of the shell, as may be desired or most convenient. The effect of the removal of this crescent-shaped area or strip is to separate the integral flange 105 B from the base or top A for a portion of the circumferential length of the flange, depending upon the length of the strip removed, and also to shorten the longest diameter of the oval-shaped top or base A, as indicated by 110 the dotted lines  $a$  in Fig. 3, thereby making said top or base more nearly circular. I



have shown the flange separated from the top or base for substantially a semicircumference; but in this respect I do not desire to be limited or restricted. In practice and as shown the cut by which the crescent-shaped strip is removed from the top or base A is somewhat removed inwardly from the peripheral edge of the top or base, thereby leaving a portion of the material of the top or base attached to the separated part of the flange B, as indicated at 5, thereby forming a lip adapted in the completed or finished cap or cover to lap over, past, or upon the adjacent edge of the top or cover.

Either before or after or simultaneously with the removal of the strip, as above mentioned, the top or base A is slit or cut through to separate the top or base into two parts A' and A<sup>2</sup>. These parts A' and A<sup>2</sup> of the top or base are designed to be suitably hinged or otherwise pivotally connected together along their cut or severed edges. As shown and in practice, though in this respect I do not desire to be limited or restricted, the severing cut or slit by which the top or base is divided into the two parts A' and A<sup>2</sup> is along a somewhat irregular line, as indicated in Fig. 5, leaving the lips 3 on the cut or severed edges of said parts, and which lips are designed to be bent or folded into shape to form hinge-bearings to receive a hinge wire or rod 4, (see Fig. 7,) whereby the parts A' A<sup>2</sup> are hinged or pivotally connected together. As shown, the cut which severs the top or base into the two parts A' A<sup>2</sup> is transversely across the longest diameter of such top or base and extends from one end to the other of the cut which is produced in the removal of the crescent-shaped strip, as above described. I do not desire, however, to be limited or restricted in this respect so long as one of the parts A' or A<sup>2</sup> is completely severed not only from its adjacent part, but also from the adjacent part of the flange B, the area of the severed or separated part of the top or base being dependent upon the size of the opening desired in the cap or cover. The reduction in the area of the top or base produced by the formation of the hinge flaps or lips 3 should be sufficient to reduce the base or top composed of the two parts A' A<sup>2</sup>, hinged together, to a circular form and of the desired size to form the completed or finished cap or cover. In Figs. 6 and 7 I have shown the shell with the two parts A' A<sup>2</sup> of the top or base formed as above described and hinged or pivoted together.

It will be obvious that while the area of the top or base A of the shell is being reduced by the removal of the crescent-shaped strip therefrom and the formation of the hinge flaps or lips 3 therein the circumferential length of the flange B remains the same as in the original blank or shell and that the part B<sup>2</sup> of such flange, (see Figs. 7, 8, and 9,) which has been separated from the top or

base, is continuously integral circumferentially with the part B' of such flange, which remains unseparated from the top or base A.

In order to take up the surplus length of the flange and to draw the separated part thereof into close relation with the edge of the top or base to form the completed cap and with the lip 5 thereon to lap upon, over, or past the edge of the base or top, the final step in the operation is to form a loop or fold (indicated at 2, Figs. 8 and 9) in the separated part of the flange, this fold or loop being lapped, bent, or folded back upon itself, as clearly shown.

In order to gain access to the contents of a bottle, jar, can, or the like to which a cap or cover embodying my invention is applied, the fold or loop 2 is loosened up sufficiently to release the lip 5 from engagement with the adjacent edge of the top or base, and then the hinged section A<sup>2</sup> of the top or base may be readily rocked or swung up, as will be evident.

If desired and in order to accommodate the handle of a spoon or similar article placed within the receptacle, a niche or recess c may be cut in the edge of the top or base A or in the peripheral edge of the part A<sup>2</sup> thereof at a convenient point, as indicated in the drawings, and a corresponding flap may be formed in the adjacent edge of the lip 5 to cover or close the same.

In Fig. 10 I have shown the completed and finished cap or cover applied to a bottle, can, jar, or the like, (indicated at D.) In practice and customarily a sealing-disk C is placed over the mouth of the receptacle D, and the edge of the flange of the cap or cover is spun, bent, or crimped under a shoulder or fillet E on the receptacle.

It is obvious that many variations and changes in the details of construction and arrangement would readily occur to persons skilled in the art and still fall within the spirit and scope of my invention. I do not desire, therefore, to be limited or restricted to the exact details shown and described; but,

Having now set forth the object and nature of my invention and a construction embodying the principles thereof, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent, is—

1. A cap or cover for receptacles, having a top or base, and an integral peripherally-continuous flange, the circumferential length of the flange being greater than the peripheral length of the top or base, a portion of the top or base, being separated from the flange and hinged or pivotally connected to the other section of the top or base, the flange adapted to be contracted in circumferential length to form the completed cap.

2. A cap or cover for receptacles, having a



top or base made in sections hinged or pivoted together, and a flange formed integrally with the top or base and peripherally continuous throughout its circumferential length; said flange being of greater circumferential length than the peripheral length of the top or base, and separated from the hinged or pivoted section of the top or base for a portion of its length, and adapted to be contracted in circumferential length to form the completed cap.

3. A cap or cover for receptacles, having a top or base and an integral peripheral continuous flange, the circumferential length of the flange being greater than the peripheral length of the top or base, a portion of the top or base being separated from the flange and hinged or pivotally connected to the other portion of the top or base, the flange adapted to be contracted in circumferential length to form the completed cap, the separated part of the flange having a lip to engage over the adjacent edge of the top or base when the flange is contracted in length.

4. A cap or cover for receptacles, having a top or base and an integral peripherally-continuous flange, said flange being of greater circumferential length than that of the top or base, the top or base having a portion thereof separated from the flange and hinged to the adjacent portion of the base, the flange having a portion thereof formed into a loop or fold to contract the diameter of the same.

5. A cap or cover for a receptacle, having a sectional top plate the parts of which are hinged together, an integral, uncut pendent flange about said top plate, a portion of said flange being rigid with one section of the top plate and the remainder of the flange, consisting of more than one-half of same, free from the other section of the top plate, the last-named portion of the flange having in it a fold which takes up the surplus material and brings said portion of the flange up to the

top plate, and said portion also provided with a lip to take over the top plate.

6. A cap or cover for receptacles, having a circular sectional top plate, the sections of which are hinged together, an integral, uncut flange pendent from said top plate, said flange being of greater length than the circumference of the top plate, a portion of the flange being rigidly connected with the periphery of one section of the top plate while the other, and greater portion of the flange, is free from the top plate, said free portion of the flange having a lip to take over the top plate.

7. A top or cover for a receptacle, having a top plate consisting of two semicircular sections hinged together, an integral, pendent, uncut flange, of greater length than the circumference of the top plate, the portion B' of said flange being integrally connected with the periphery of the section A' and the longer portion B<sup>2</sup> being free from the periphery of the section A<sup>2</sup>, and provided with a lip and a fold to take up its surplus length.

8. A cap or closure for a receptacle, having a top plate consisting of two semicircular sections hinged together, an integral, pendent, uncut flange, of greater length than the circumference of the top plate, the portion B' of said flange being integrally connected with the periphery of the section A' and the longer portion B<sup>2</sup> being free from the periphery of the section A<sup>2</sup>, said section A<sup>2</sup> being provided with a recess *c*, and said portion B<sup>2</sup> of the flange being provided with a flap to cover the same.

In witness whereof I have hereunto signed my name, this 16th day of November, 1905, in the presence of two subscribing witnesses.

WILLIAM H. DODGE.

Witnesses:

WILLIAM J. FIRTH,  
H. G. HOSE.