

No. 683,181.

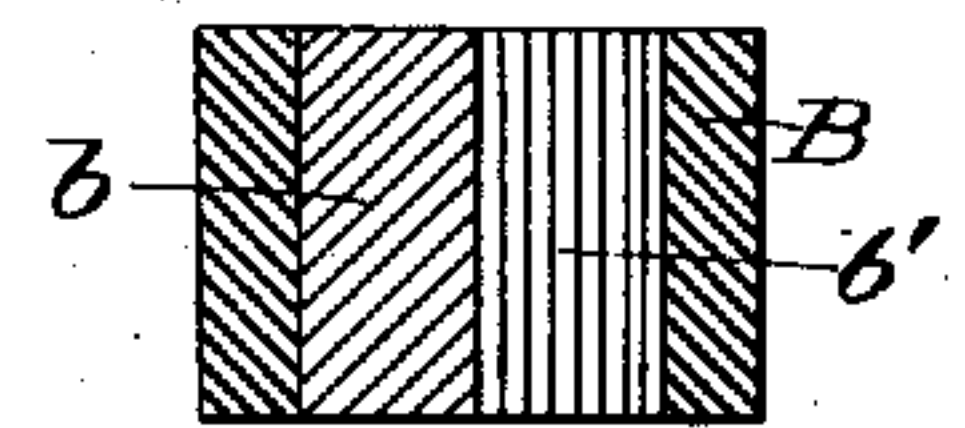
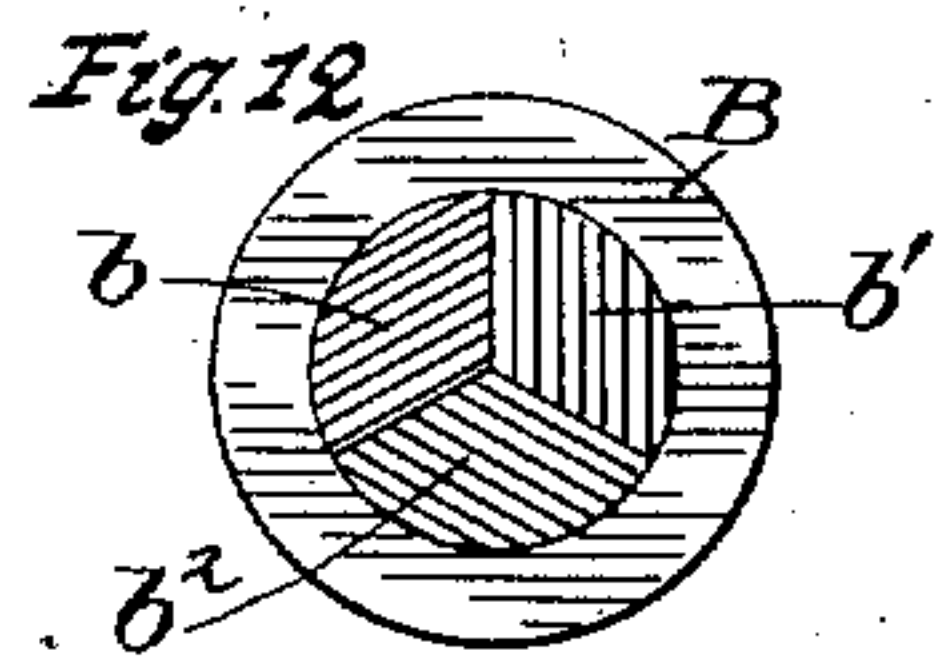
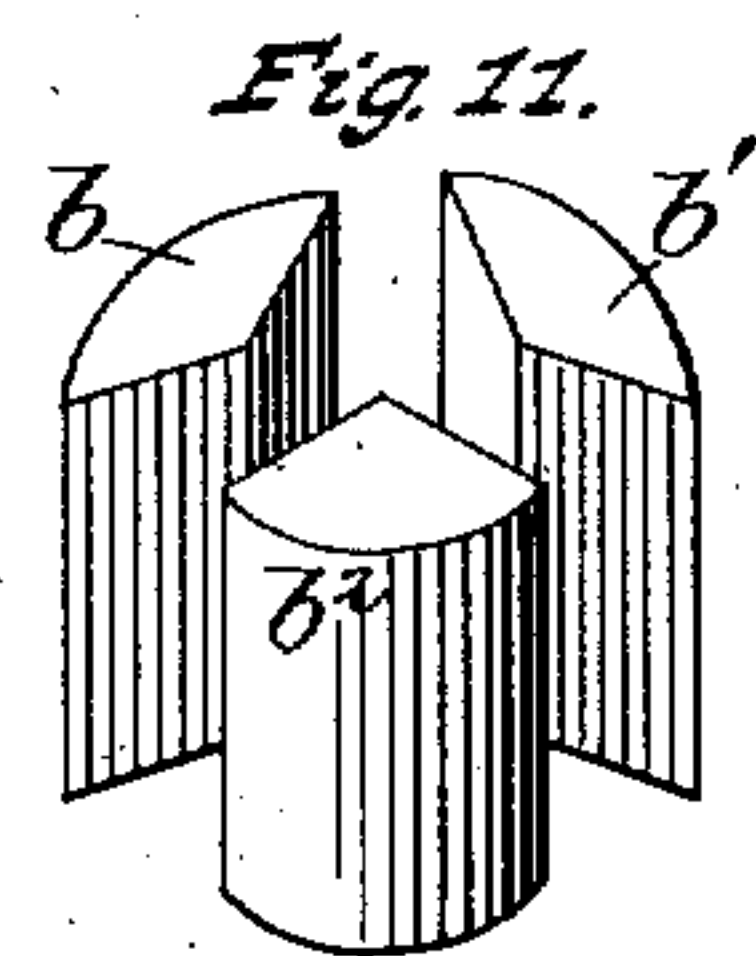
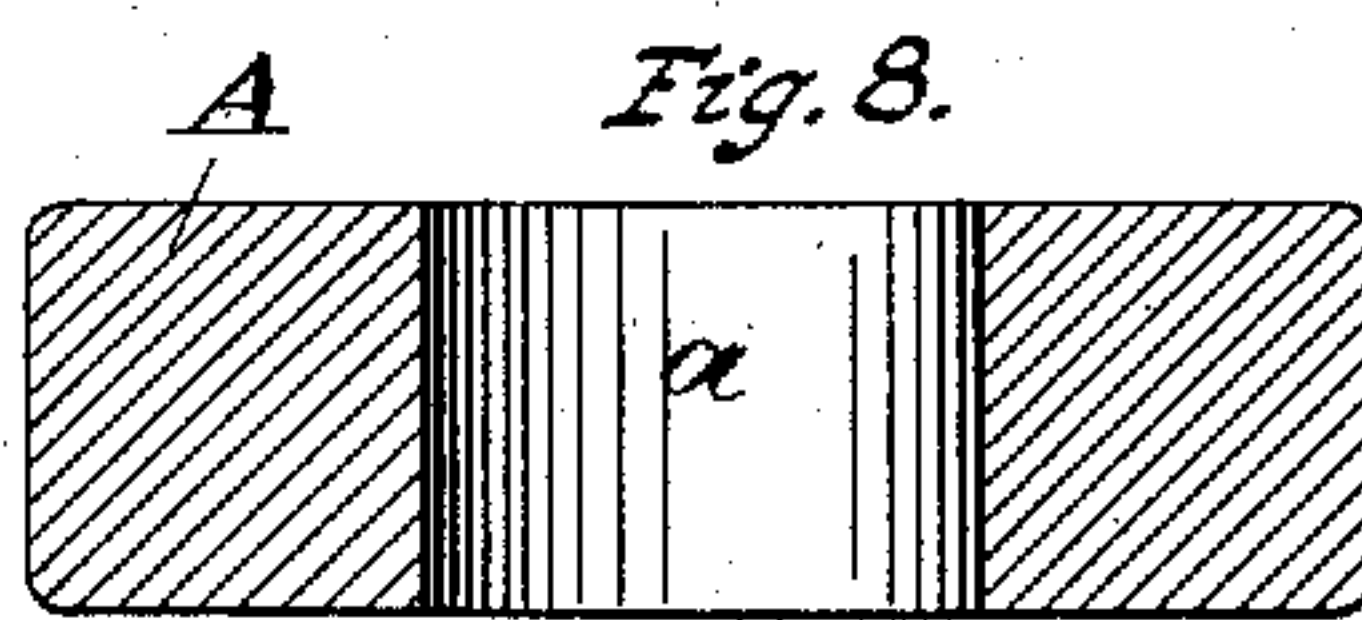
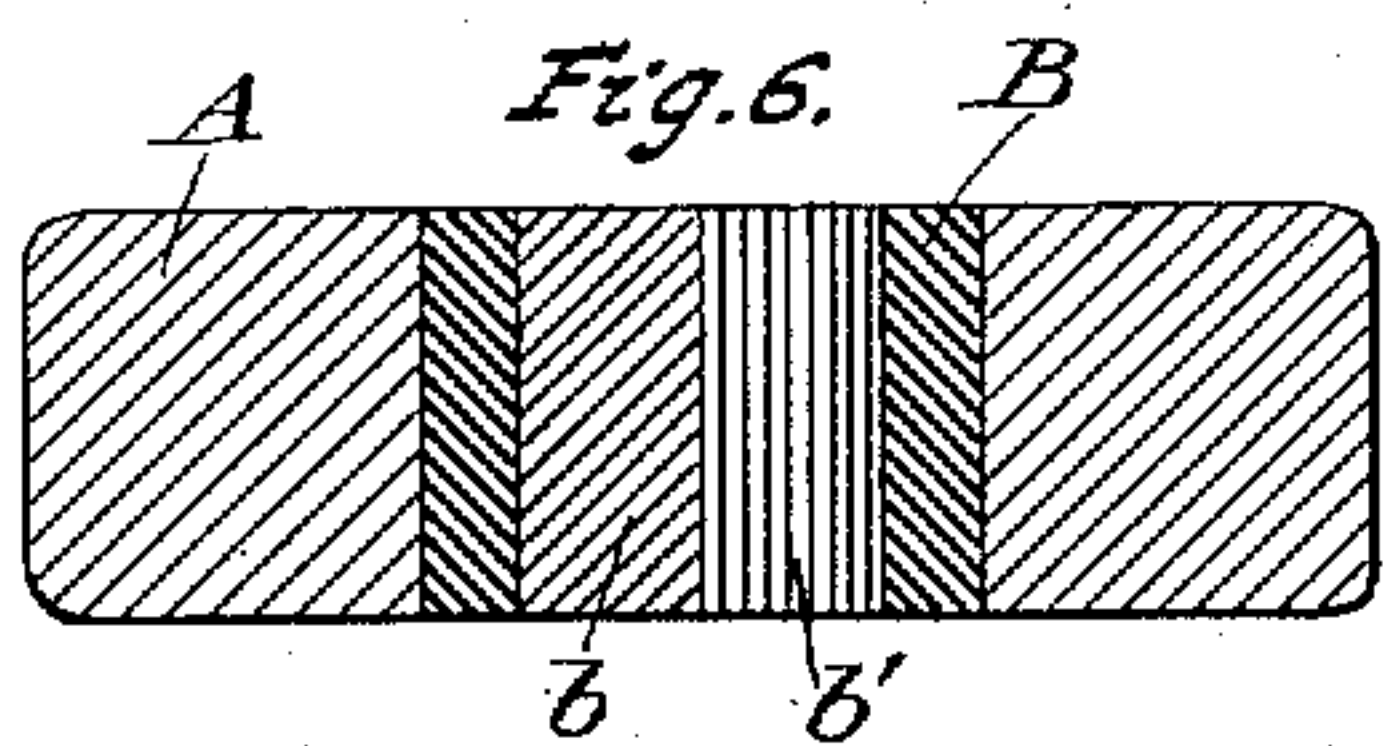
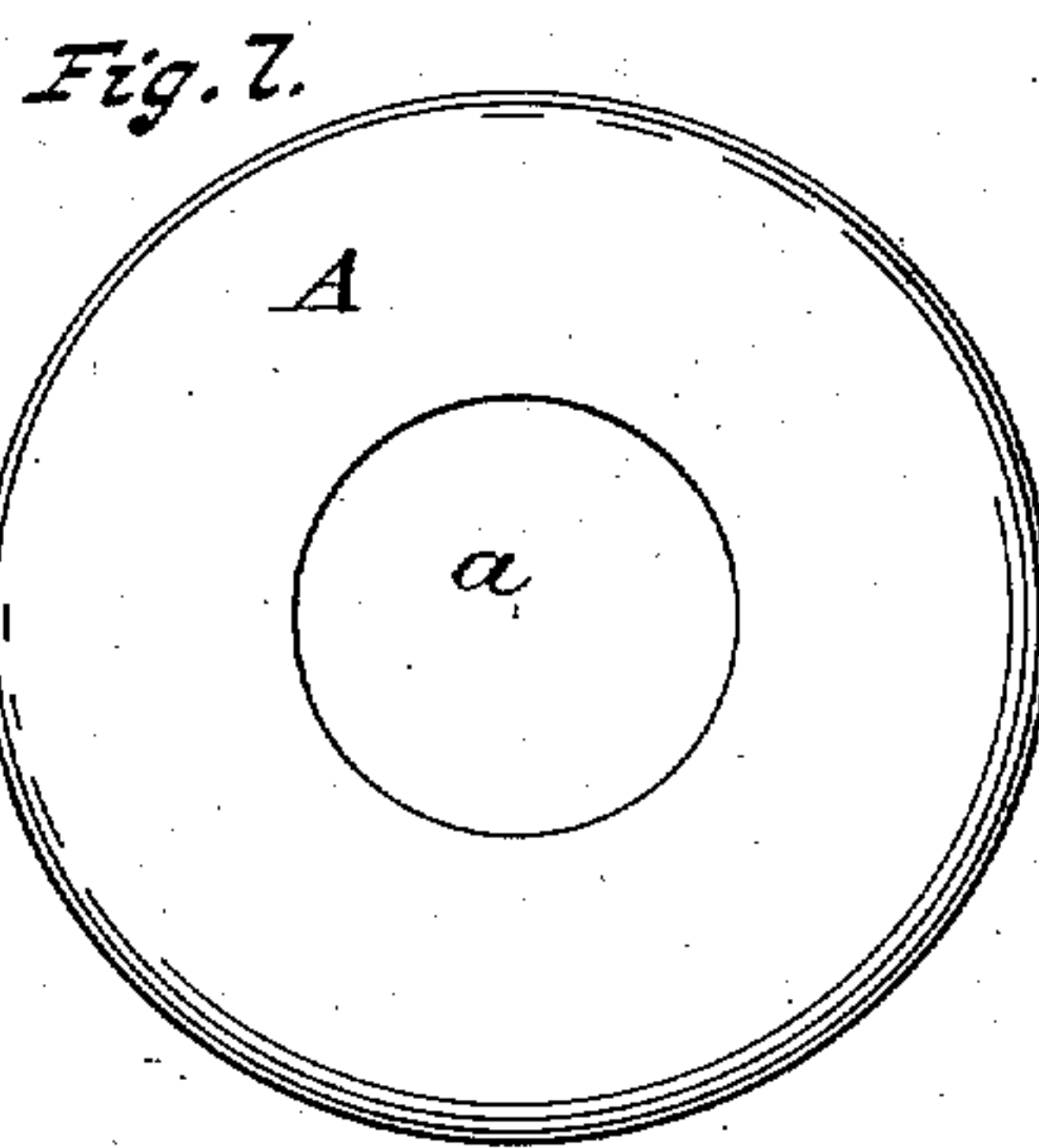
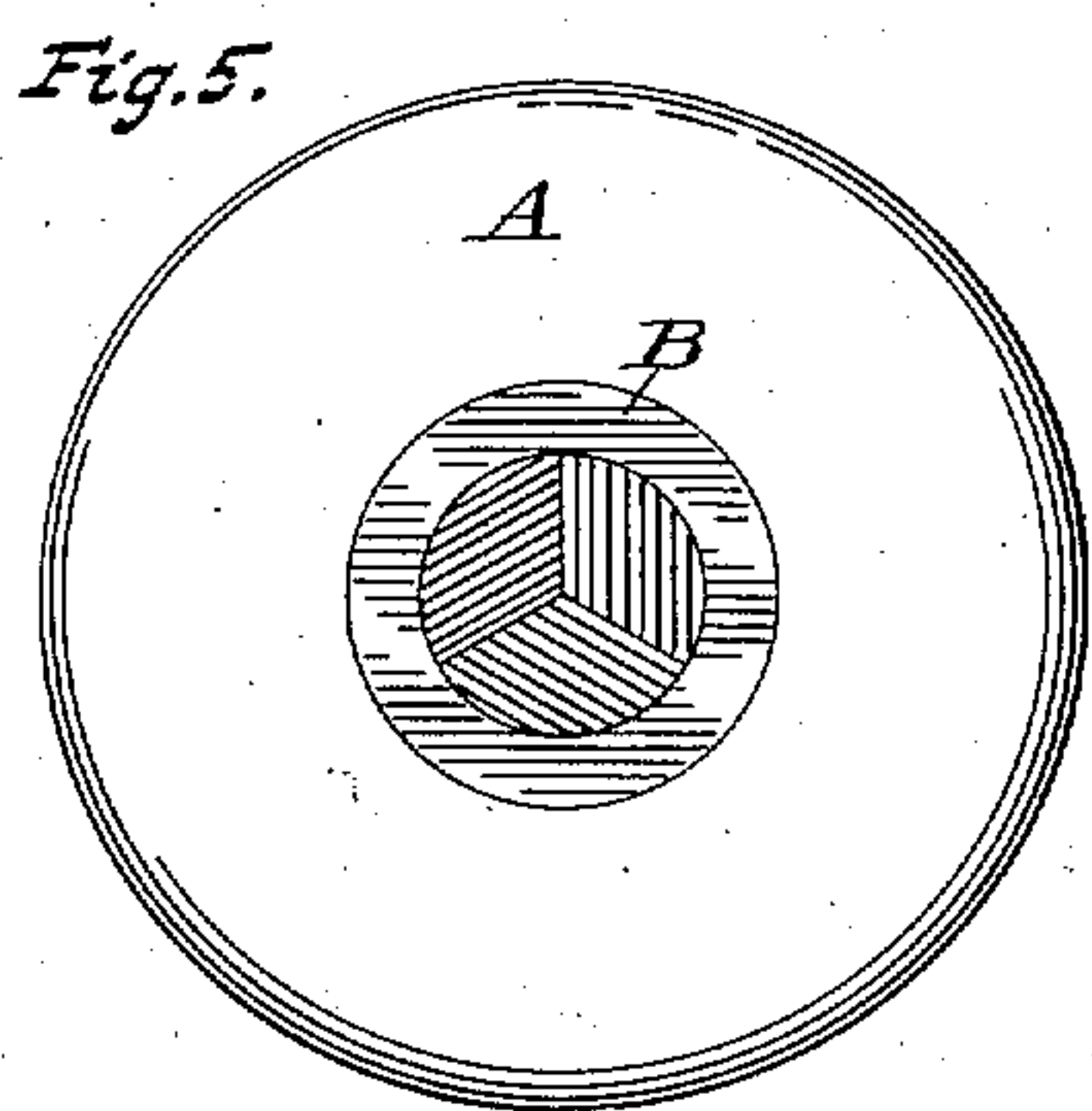
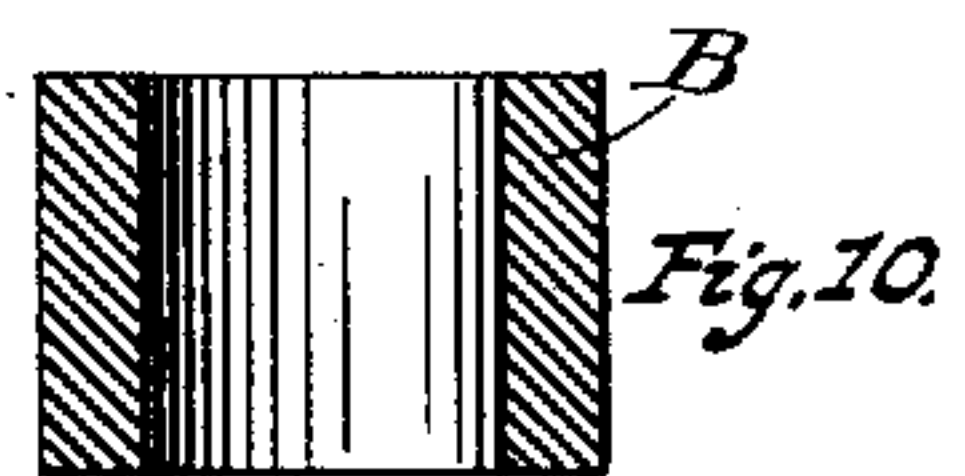
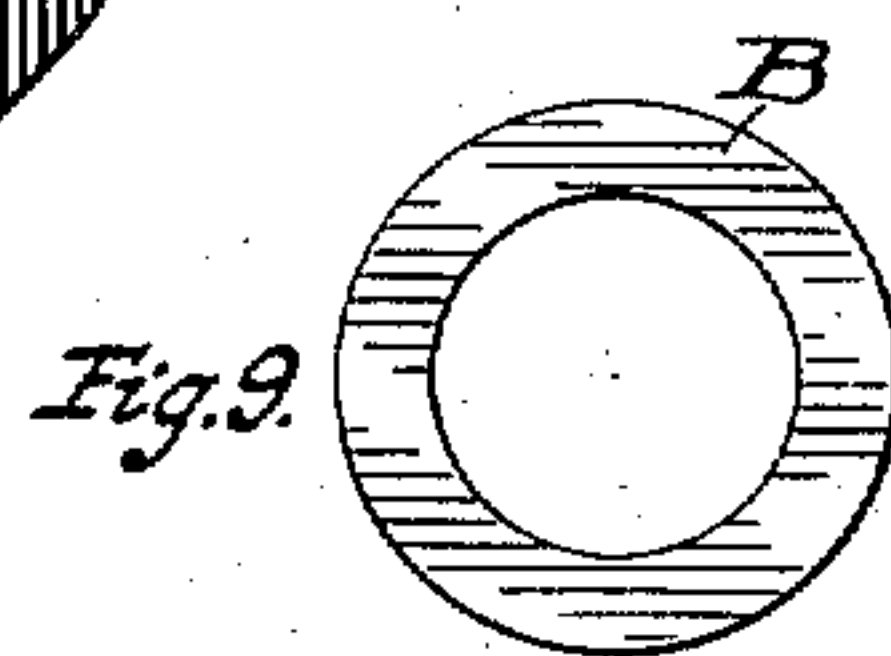
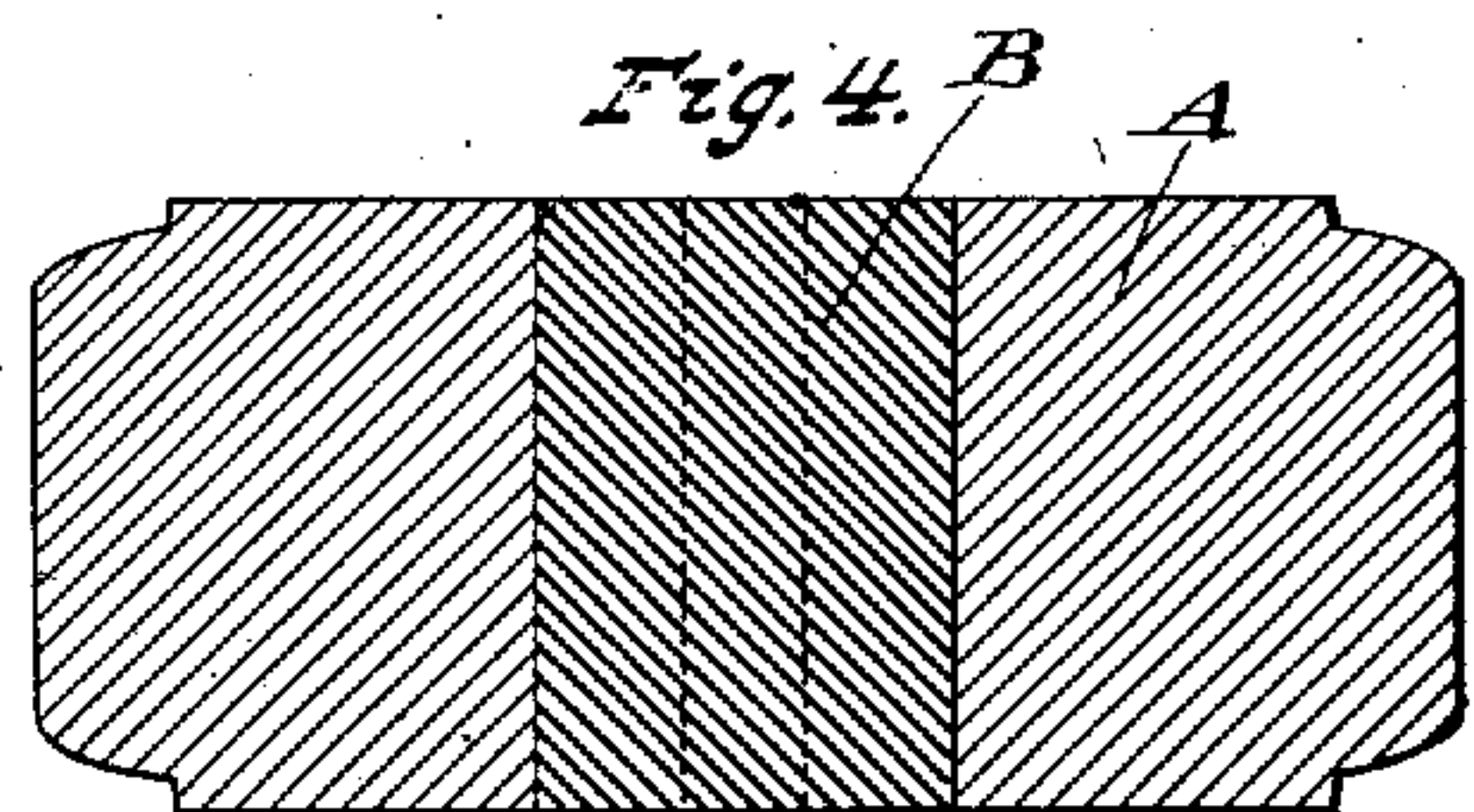
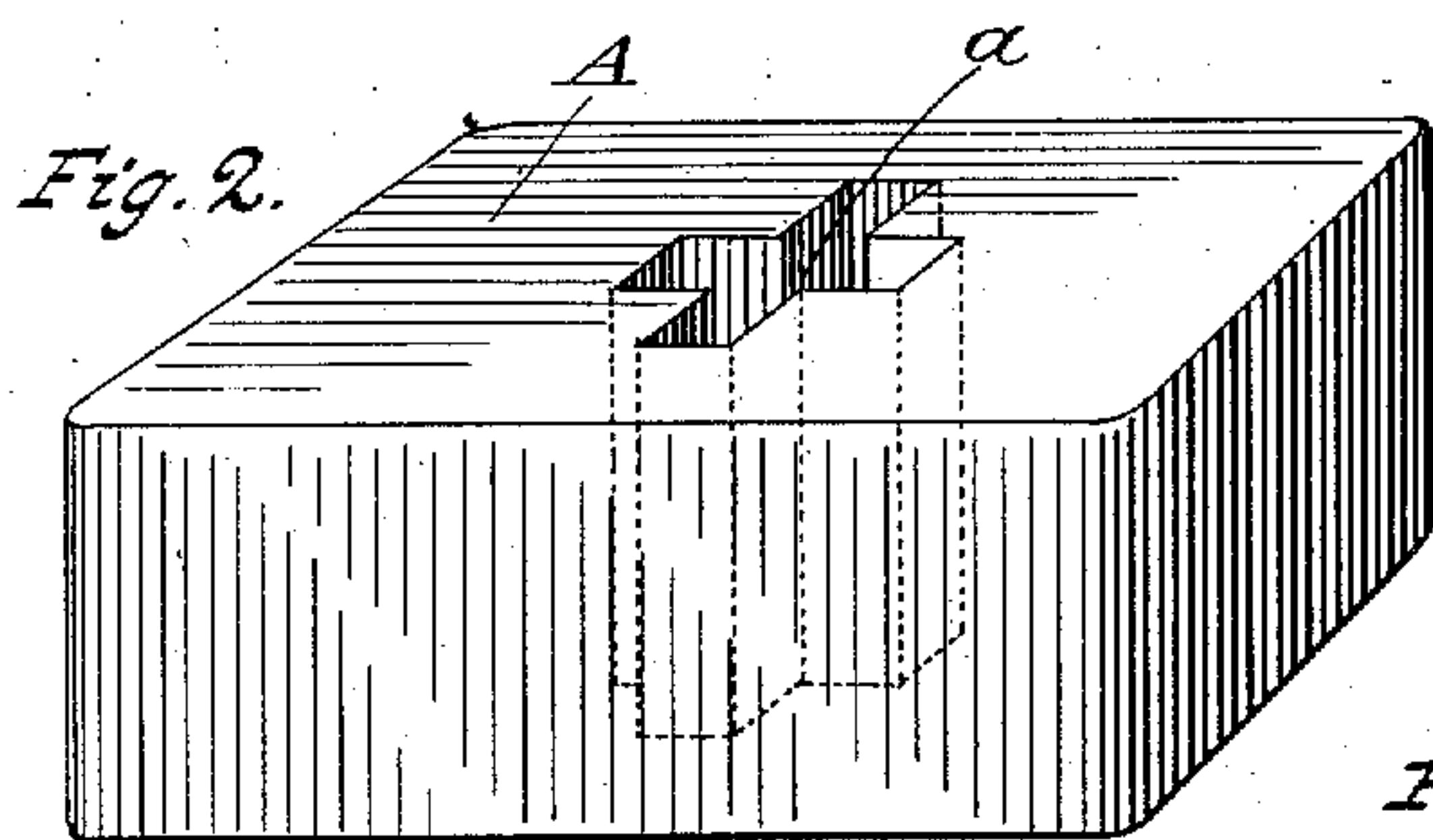
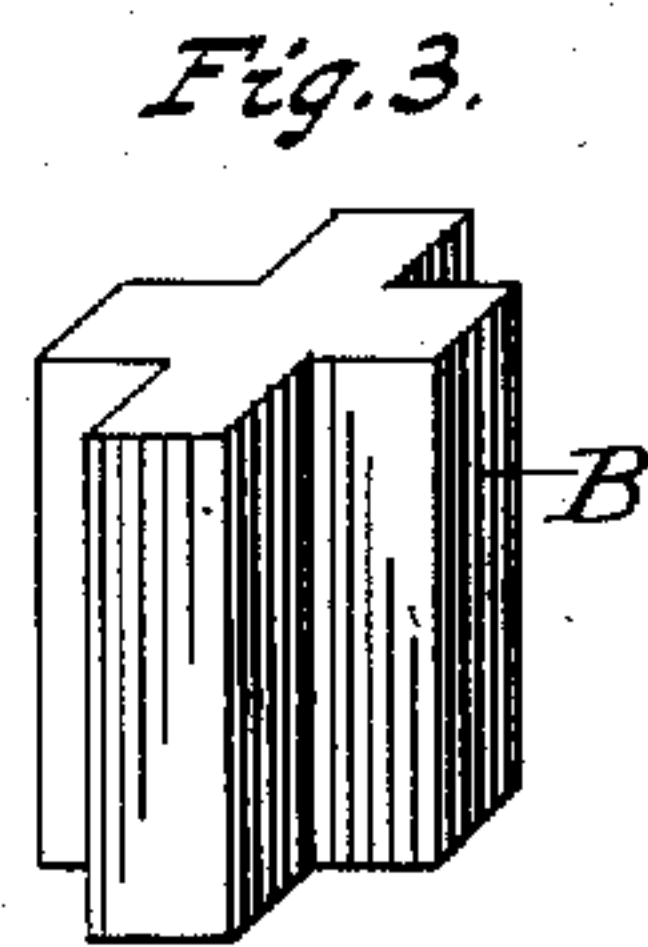
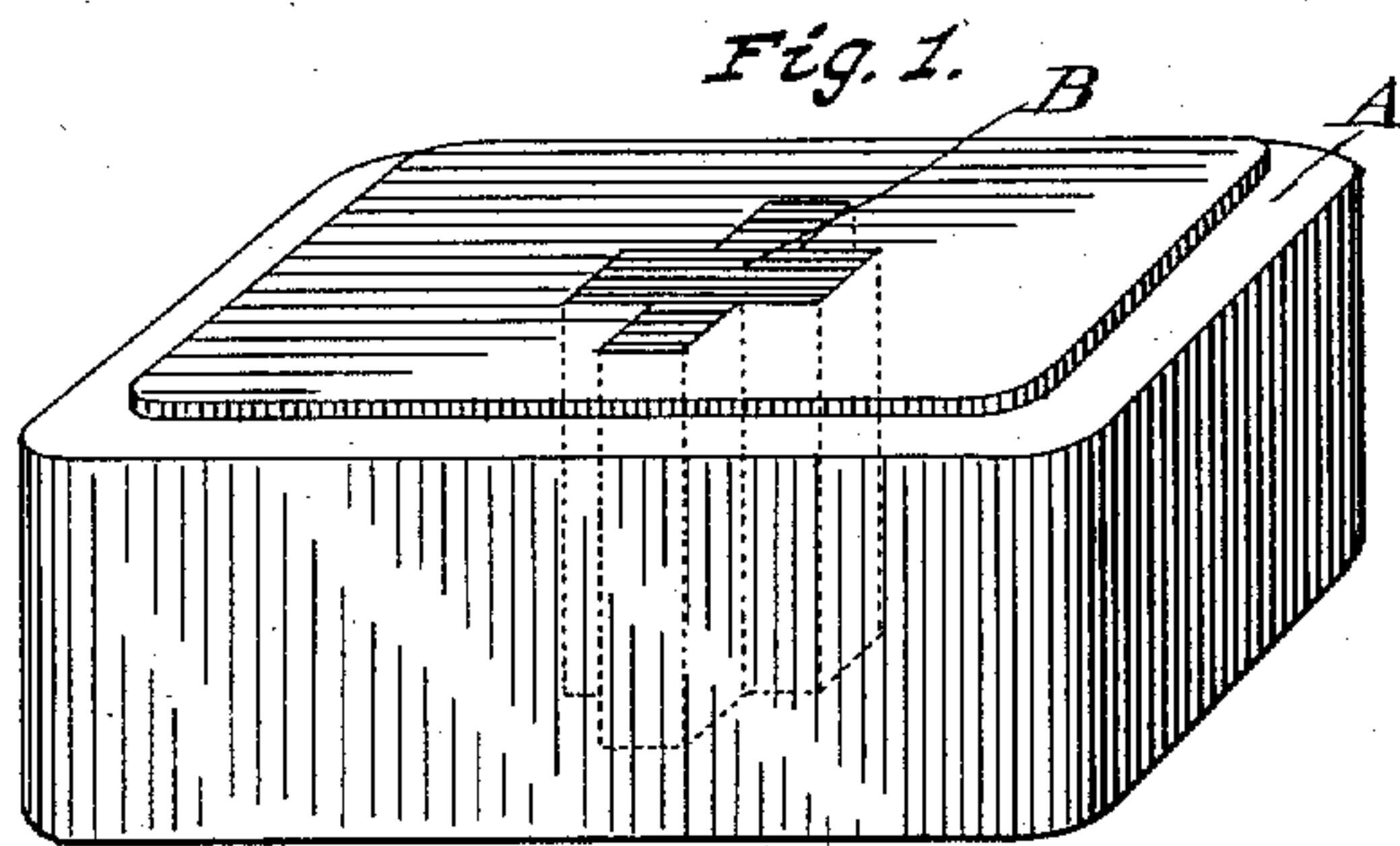
Patented Sept. 24, 1901.

H. E. MERENESS.
METHOD OF MAKING SOAP CAKES.

(Application filed May 5, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

Fig. 14.

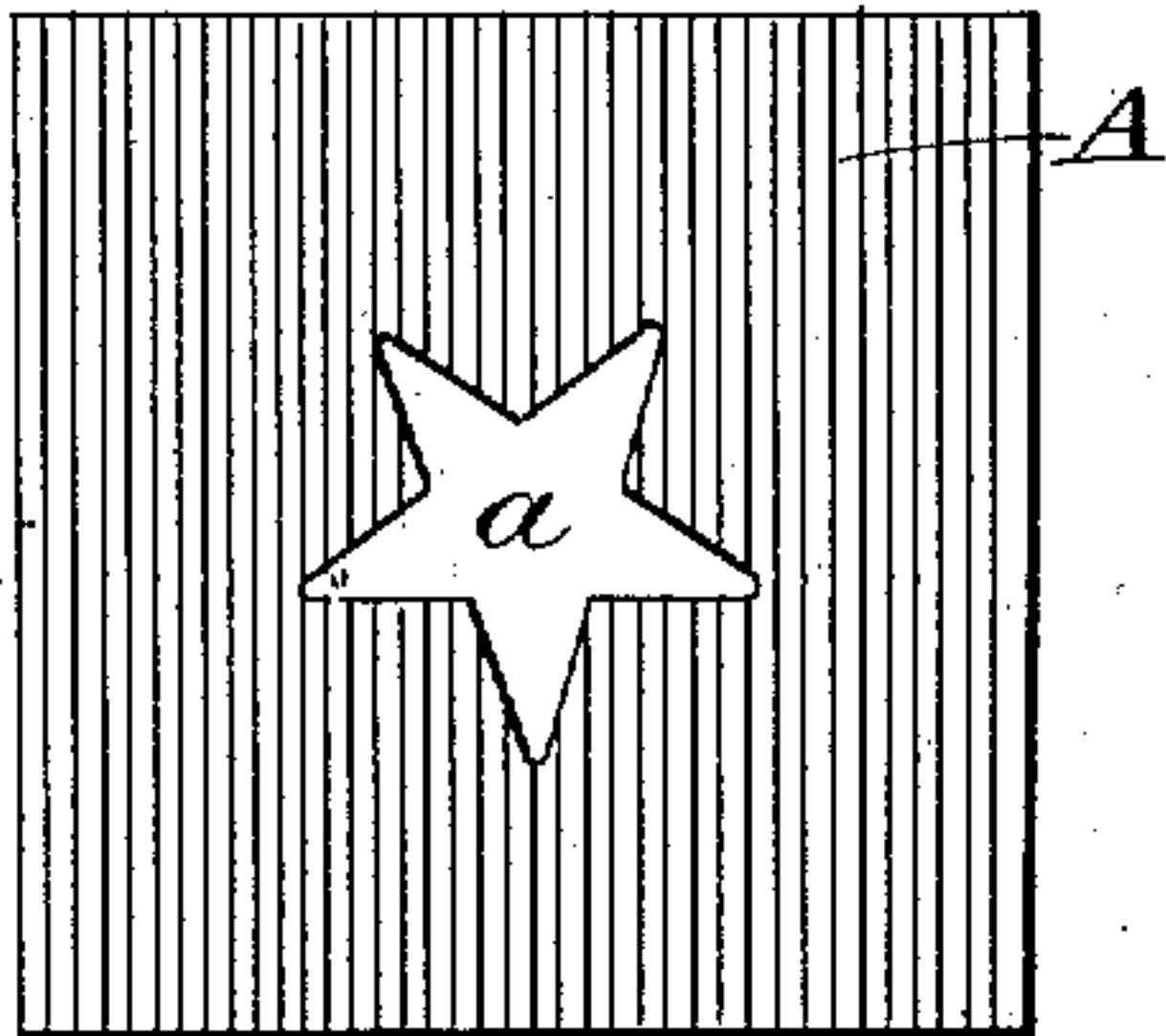


Fig. 15.

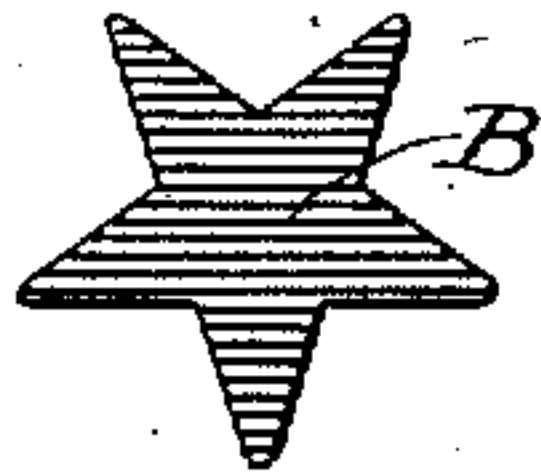


Fig. 16.

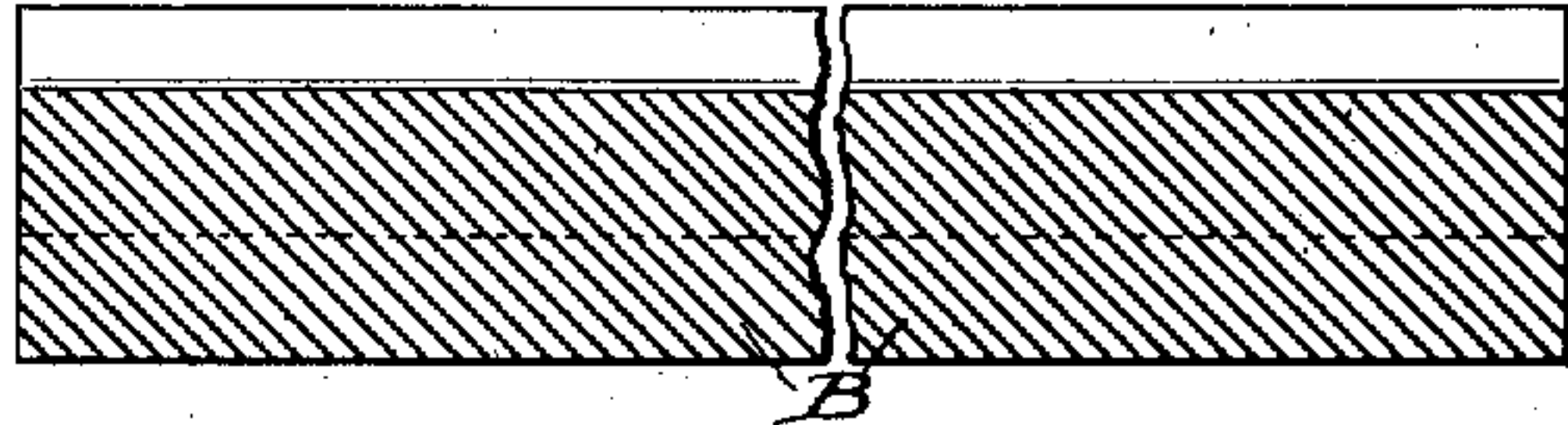


Fig. 17.

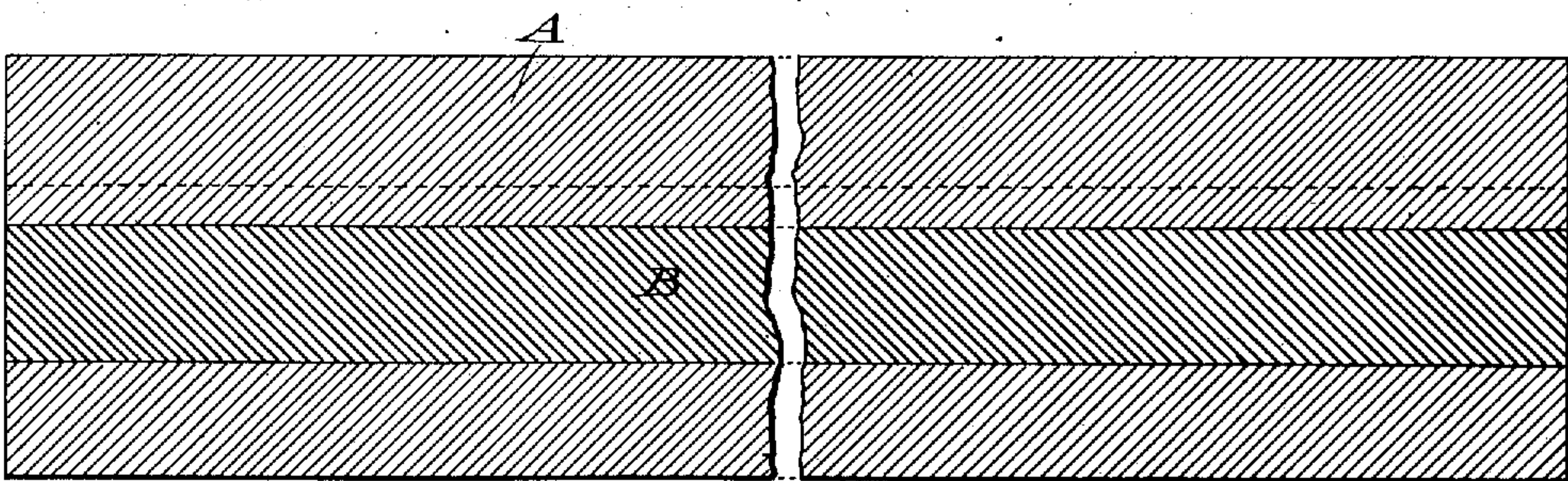
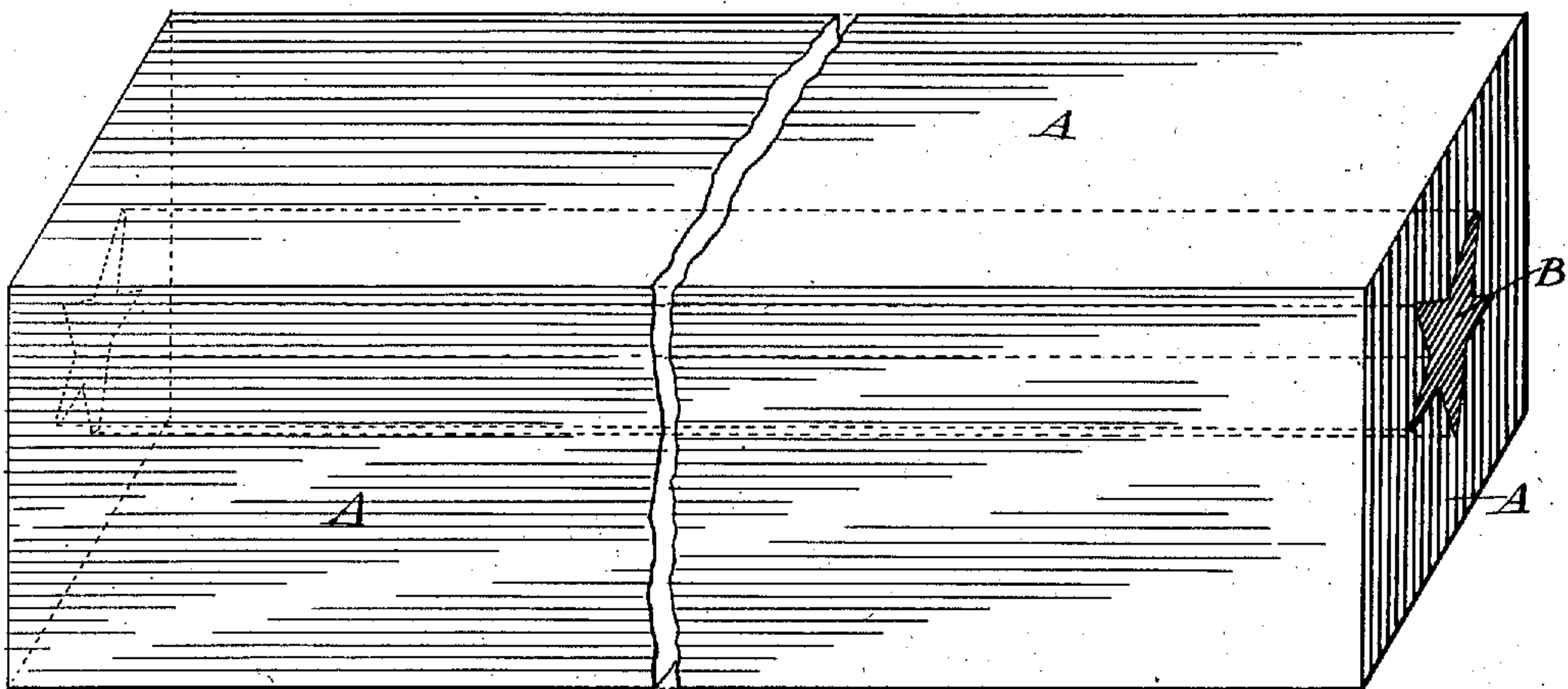


Fig. 18.

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UNITED STATES PATENT OFFICE.

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METHOD OF MAKING SOAP CAKES.

SPECIFICATION forming part of Letters Patent No. 683,181, dated September 24, 1901.

Application filed May 5, 1900. Serial No. 15,585. (No specimens.)

To all whom it may concern:

Be it known that I, HENRY E. MERENESS, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented new and useful improvements in methods of producing cakes or bars of soap which combine two or more distinctly-contrasting colored opaque bodies of soap, of which the following is a specification.

This invention relates to an improved method of producing cakes or bars of soap which comprise different-colored opaque bodies of soap substance, one being exterior and the other interior, which bodies are in strong contrast as to color and are in view only from the sides or ends of the cakes or bars at which the outer ends of the contrasting colored interior bodies terminate; and it has for its object the production of cakes or bars of opaque soap which embody one or more interior body portions, having each a color which is in strong contrast with the color of the adjacent exterior body portion and a configuration of form readily recognizable, so that both the color and form of the contrasting interior body portions of the cakes may be viewed at all times only from their end areas, which terminate on planes with two opposite surfaces of the exterior body.

The method heretofore practiced to produce cakes and bars of soap embodying in some cases two or more bodies of different kinds and qualities of soaps and in other cases two or more bodies of different colored soaps and in other cases marked or branded interior bodies, which might be of substance not soap, enveloped within an exterior transparent body, were both slow in steps and procedure of operations which required a great expenditure of both time and labor for producing finished commercial products. My new method dispenses with the use of both exterior and interior molds, also exterior molds and soap-displacing devices heretofore used for both shaping and placing bodies of soaps, by process of molding liquid soaps in form and combining the same by removal of interior molds and displacing pieces, as before practiced, and it also produces party-colored soap cakes comprising an exterior body portion of one same color throughout

and an interior body portion of soap of a contrasting color without employment of a series of parallel strips of differently-colored soaps produced by means of a series of dies or apertures and assembled and cemented together side by side and producing soap cakes having exterior body portions of divers colors, as heretofore practiced; also, obviates the employment of arbitrary designs, being furrowed in the sides of soap cakes or produced by perforations in the same and filled with colored liquids or powdered soaps and beaten into the substance of the cake, as also has been practiced. It avoids the production of soap cakes with numerous small holes through them, arranged in form for producing the desired trade-marks and remaining unfilled until by use they become filled with soiled lather from the same soap, as has also been produced; and it also obviates the necessity of producing by expensive methods and special apparatus interior cores which may be of material other than soap, bearing on one or both sides thereof brand-names or trade-marks sunken in the substance of these interior cores, and then inserting the same into perforations made through soap cakes of transparent substance, which permits these branded or marked interior cores to act as labels which are visible through the transparent outer body portion of the cakes, as has also been practiced.

My method to produce soap cakes which have integral in each cake two or more different-colored opaque bodies—one exterior and enveloping, except at ends, one or more interior body-pieces of different color—is clearly revealed by the following description, taken in connection with the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of an oblong cake of soap produced by my method and embodying the new features therein. Fig. 2 is a perspective view of the exterior or main body of the cake and illustrates the first step. Fig. 3 is a perspective view of an interior and smaller body of soap produced in the second step for combining with the main body shown in Fig. 2 for producing the cake having the features shown in Fig. 1. Fig. 4 is a section elevation of the completed soap cake. Fig.

5 is a plan of a circular cake of soap produced by my method and embodying my new features and showing several different contrasting bodies of soap combined. Fig. 6 is a section of the same. Fig. 7 is a plan of the exterior or main body of the cake. Fig. 8 is a section of the same. Fig. 9 is a plan of an interior body. Fig. 10 is a section of the same. Fig. 11 shows perspective views of three inter-interior bodies of soap employed in the combination shown in Fig. 5. Fig. 12 is a plan of their combination with the body shown in Figs. 9 and 10 before assembled and combined in the cake shown in Fig. 5. Fig. 13 is a section of same. Fig. 14 is an end view of the exterior or main body of a bar of soap before the completion of the bar by my method. Fig. 15 is an end view of the interior and lesser body. Fig. 16 is a longitudinal section of said interior body. Fig. 17 is a perspective view of the completed bar produced by my method, and Fig. 18 is a longitudinal section of the same.

Similar letters of reference refer to similar parts throughout the several views.

My first step in the practice of this method is to produce cakes or bars of what I term "primary" form, which primary cakes or bars may be made in accordance with any known formulas as to combinations of fatty substances or oils and alkalis or other ingredients and coloring agents to be used for producing soaps of kind, color, quality, or characteristics preferred to be given to the completed commercial article. Any known suitable means and manner of mixing, incorporating, amalgamating, and working the several ingredients and substances and cooking the same from bringing the soap compound into condition to be cut into bars or cakes as may be found to be advantageous may be employed. Each of these bars or cakes thus produced constitutes the soap material from which are to be produced two or more differing body-pieces, each for use for a different purpose and place, in the combination of body portions which may be comprised in the cakes or bars when commercially complete. My next step is to produce from the products of the first step (the material in the primary cake or bar of form above mentioned) exterior body-pieces A, which are to form the exterior body portions of the cakes or bars when completed for market and use, and the interior body-pieces B, which are to form, respectively, the interior body portions of the commercially-finished cakes or bars and be of a color in the finished cakes or bars which may strongly contrast with the color of the body portion of the soap surrounding these interior body portions.

In the practice of the first step I produce two or more lots of primary cakes or bars which are the same in all respects as to their form, proportions, ingredients, quality, and shrinking characteristics, but different as to color, so as to have a color contrast. For con-

venience and making clear my preferred order of procedures from first to last for carrying this method in practice, I will designate one of the lots of these primary cakes or bars as "lot 1," in which all of the cakes or bars are pink in color. The other lot (when but two lots of primary cakes are produced) I will designate "lot 2," in which lot all the cakes or bars are, say, green in color. These primary cakes in, say, the two lots 1 and 2 will be allowed to arrive at a suitable and equal degree of hardness, which may be ascertained by test or observation, when the second step of procedure in this method will be had. This second step of procedure consists in forming from each primary cake in both lots 1 and 2 (by means of suitable cutting instruments operated by hand, foot, or power) an exterior body-piece A and an interior body-piece B. The body-piece A will retain the original shape of the primary cake from which it was produced and will have in it perforations *a*, which may be of any selected form of outline in its cross area—as, say, in the form of a cross, as shown in perforations *a*, in exterior body-piece A, Fig. 2, or in the form of a star, as shown in perforations *a* in exterior body-piece A in Fig. 14. The interior body-piece B, produced from each primary cake in both lots, will be in its outline of form in shape of that of perforations *a*, provided in each of the exterior body-pieces A, produced from the same two lots, and be in the form of a cross, as shown in Fig. 3, for correspondence with the perforations *a* (shown in exterior body-piece A in Fig. 2) or in form of a star, as shown in Fig. 15, for correspondence with the perforations *a*. (Shown in Fig. 14.)

It is to be understood that the cutting instruments, operated to produce from the primary cakes or bars of each lot the exterior body-pieces A, having perforations *a* and the interior body-piece B in correspondence with said perforations *a*, should embody cutting-blades of form and size corresponding with that of both the said perforations *a* and interior body-pieces B in their cross areas to be produced from the primary cakes and are made with the greatest possible thinness of metal consistent with their required service, so as to adapt the cutters to produce perforations in the cakes of each lot just large enough to admit the nice fitting of the interior body-pieces B produced and to be inserted in the exterior body-pieces of the other lot.

The second step of procedure having been carried into practice, I now proceed with the third step in this method, which step consists in combining with each exterior body-piece A in each of the two lots an interior body-piece B, of form and size corresponding with the perforations *a*, provided in pieces A, but of differing color—that is to say, the interior body-pieces B produced from the primary cakes or bars of lot 1 are combined with the exterior body-pieces A, having perforations *a* and produced from the primary cakes or

bars of lot 2, and the pieces B produced from the primary cakes or bars of lot 2 are combined with the pieces A, having perforations *a* and produced from the primary cakes or bars of lot 1. The completed cakes or bars now produced will be in two lots, which for convenience I here term "completed lots" 3 and 4. One lot, as "lot 3," will consist of cakes or bars having exterior body portions of color the primary cakes or bars of lot 1 were before they were changed into body-pieces A and B and the interior body portions of color the primary cakes of lot 2 were before changed into pieces A and B, while the other lot, as "lot 4," will consist of cakes or bars having exterior body portions of color the primary cakes or bars of lot 2 were before they were changed into pieces A and B and the interior body portions of color the primary cakes or bars of lot 1 were before they were changed into pieces A and B. This combining of each interior body-piece B of one color with a perforated exterior body-piece A of a different and contrasting color may be effected in different ways for completing the cakes or bars. One way of procedure is by employing one apparatus which may combine a device for producing from primary soap cakes of lots 1 and 2 the exterior body-pieces A, having perforations *a*, and the interior body-pieces B, as above described, and also an apparatus for integrating the adjacent surface substances of both said pieces after the latter pieces have been inserted within the perforations in the former pieces, or two similar or like apparatus may be employed and operated each by a suitable operator, one for operating with the primary soap cakes of, say, lot 1, and the other of similar soap cakes of lot 2, while a third operator may transfer alternately the interior body-pieces B of lot 1 to within the perforations *a* of exterior body-pieces A of lot 2 and those interior body-pieces B of lot 2 to within the perforations *a* of exterior body-pieces A, produced from lot 1, and pass the same to a fourth operator, who by means of a suitable compressing apparatus will subject these soap cakes, now embodying the two separate, but strongly contrasting, colored body-pieces A and B, to pressure from outside all around the exterior body-pieces and on the exposed ends of the interior body-pieces sufficiently great for causing the adjacent surface substances of the interior pieces B and exterior pieces A to unite and become, in fact, integral portions in the respective completed soap cakes, which cakes, respectively, will now comprise an exterior opaque soap portion of one color and an interior opaque soap portion of a contrasting color, of which latter the outer end surfaces only will be visible from first to last until the cake is used up.

In some cases where orders to be filled call for soap cakes having exterior body portions of all the cakes ordered to be of only one particular color and the interior body portions

of one particular contrasting color or a stated portion of the order to have the interior body portion of one particular contrasting color 70 and another stated portion of another particular contrasting color I in such cases produce the necessary interior body-pieces B from suitable bars of soap of like kind as the primary cakes from which the exterior body-pieces A are to be produced, but of the contrasting color preferred, and combine the two said body-pieces in the manner above described as practiced when the said exterior body-pieces and the interior body-pieces are 80 both made from primary cakes of like soap, but of contrasting colors.

When the soap cakes are to embody three or more color-contrasting opaque soaps, having an exterior body portion of one color and 85 two or more interior body portions of other contrasting-colored like soaps, some of these other contrasting interior portions—say as the inter-interior portions—may be produced from soap bars of designated colors whose exterior portions are not used in any soap cakes, while the outer body portion and the exterior one of an assemblage of interior pieces, as piece B in Figs. 5, 6, 9, 10, 12, and 13, may both be made from primary cakes or bars of 95 two-color contrasting lots 1 and 2, while the inter-interior pieces *b b' b''* may be made from soap bars of different and contrasting colors and be combined by being assembled by transfer and integration of adjacent surface substances by procedures had substantially as I have described. 100

It will be readily seen that by my above-described method soap cakes, opaque in character of substance and the same in quality 105 and characteristics throughout and in the integrate whole of the cakes, respectively, an exterior body portion and an interior body portion of color strongly contrasting with that of the exterior portions, may be more rapidly and 110 cheaply produced in the form of hard molded cakes than by the old processes; that this method obviates the use of numerous molds of many forms and large number of molding-platforms of large areas and complicated and 115 expert operations had for pouring liquid soaps and handling and manipulating the same, and also obviates the necessity of using large areas of drying-rooms for drying the liquid products had from molding, and further obviates the practice of surface furrowing and 120 filling marking furrows with colored liquid or powdered soaps and producing, branding, and marking pieces of soap for use as interior pieces within cakes of transparent soaps and 125 other expensive and slow processes heretofore employed for producing soap cakes embodying parts or portions having different and contrasting colors and different qualities and characteristics. 130

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

1. The method herein described, to produce

a soap cake, which consists in producing a solid cake of soap of preferred form and color, then making through the same in a preferred direction a perforation of an arbitrary design, in cross direction, and also producing from a second cake of soap of substantially the same character as that of the said previously-perforated cake, but of a contrasting color a body of form and proportions corresponding with the form and proportions of the perforation provided in said first soap cake, next inserting this latter color-contrasting body of soap within the perforation provided in the first cake and then uniting the adjacent surfaces of the said exterior and interior body portions of the cake by applying extra pressure to all the sides and ends of the same, substantially as set forth.

2. The method herein described to produce cakes of soap, which consists in producing two similar lots of primary cakes of like form and of substantially the same character of soap, of which those of one lot are of color contrasting with that of those of the other lot, next producing from each of the primary cakes of the respective color-contrasting lots an exterior body-piece which has through it a

perforation of arbitrary form of design which is in cross area and proportions similar to that through the other cakes, and an interior body-piece of outline of form and proportion in correspondence with the perforations in the respective exterior body-pieces, next producing two new lots of soap cakes from the exterior and interior body-pieces, now produced from the original two lots of color-contrasting primary cakes, by combining the respective interior body-pieces produced from the primary cakes of one color lot, with the exterior body-pieces, respectively, produced from the primary cakes of the other lot so that the interior body-pieces of like color may be enveloped within the exterior body-pieces of the different and contrasting color, and then uniting the adjacent surfaces of the exterior and interior body portions of the respective cakes, of the said two new lots by extra pressure applied to all the sides and ends of the same, substantially as set forth.

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