

No. 656,214.

Patented Aug. 21, 1900.

C. RADCLIFFE.
BUTTON.

(Application filed Dec. 9, 1899.)

(No Model.)

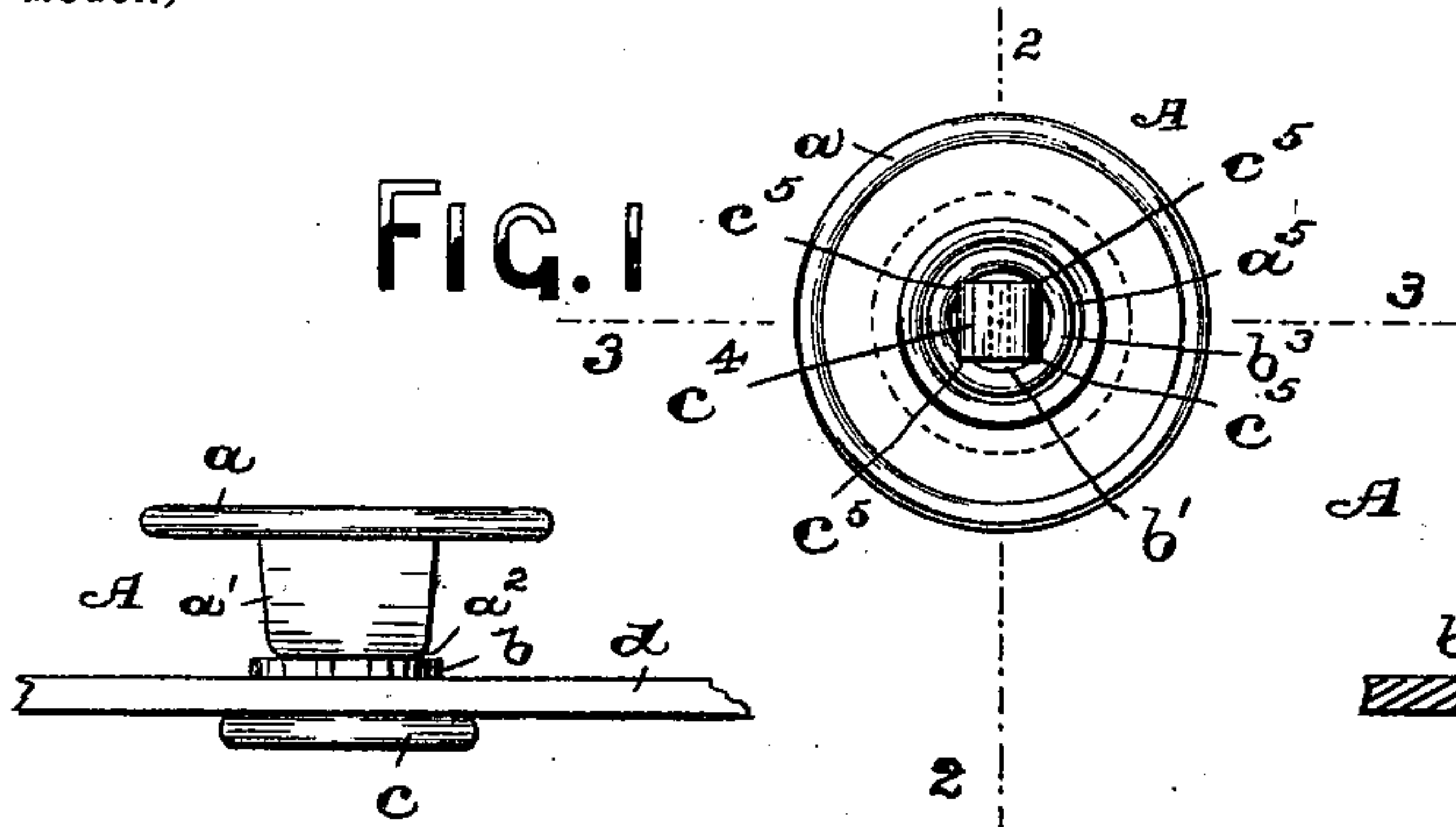


FIG. 1

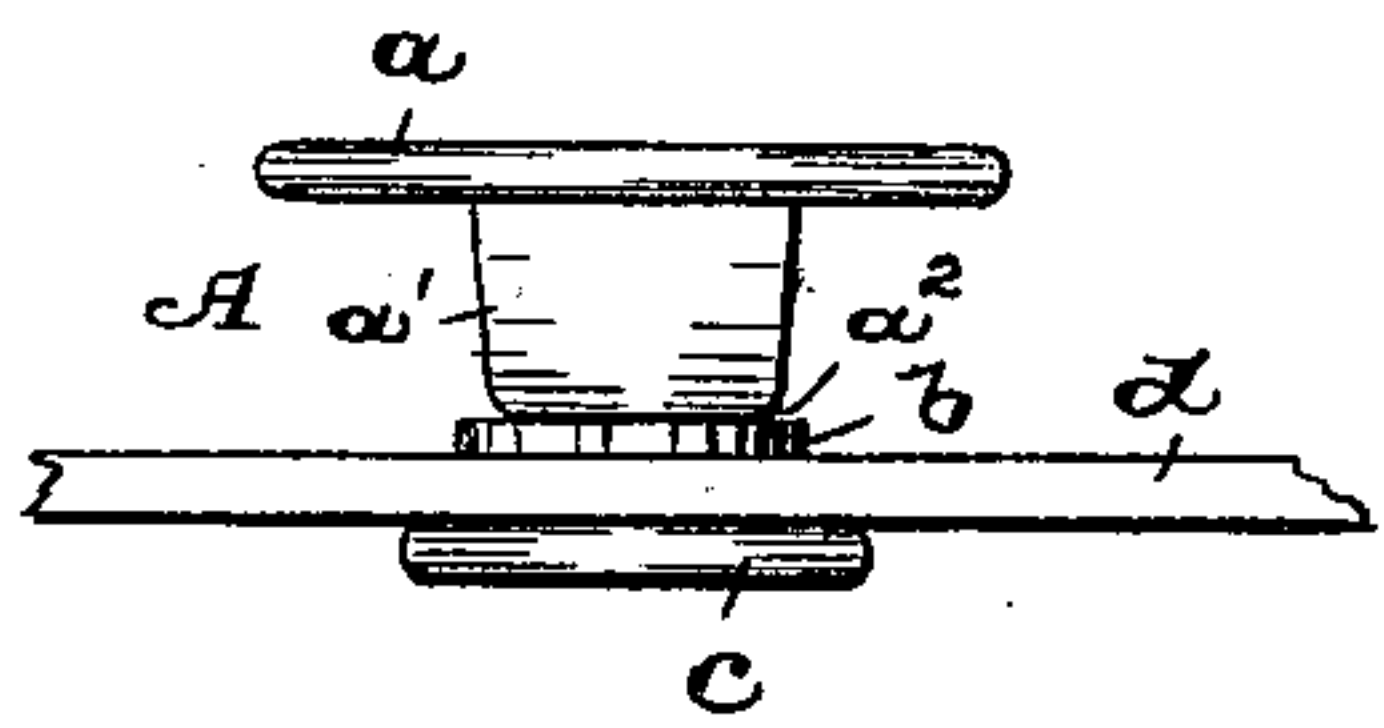


FIG. 2

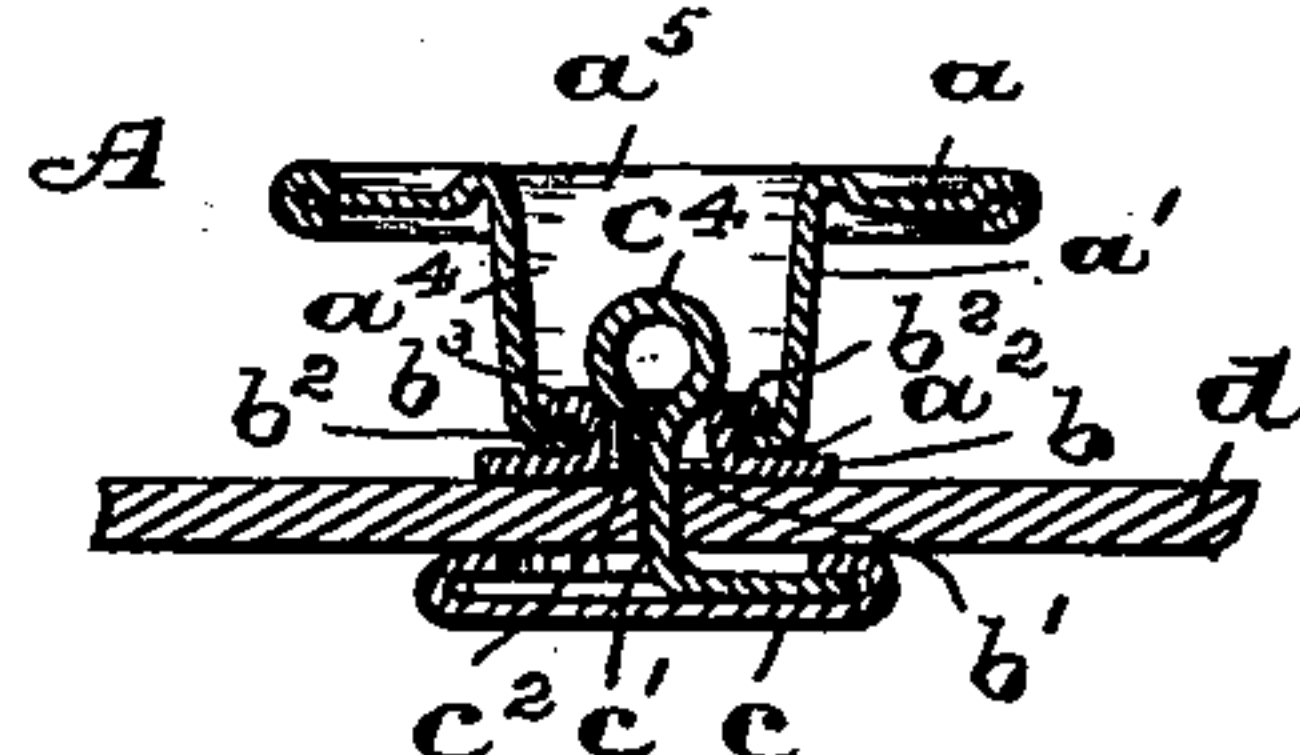


FIG. 3

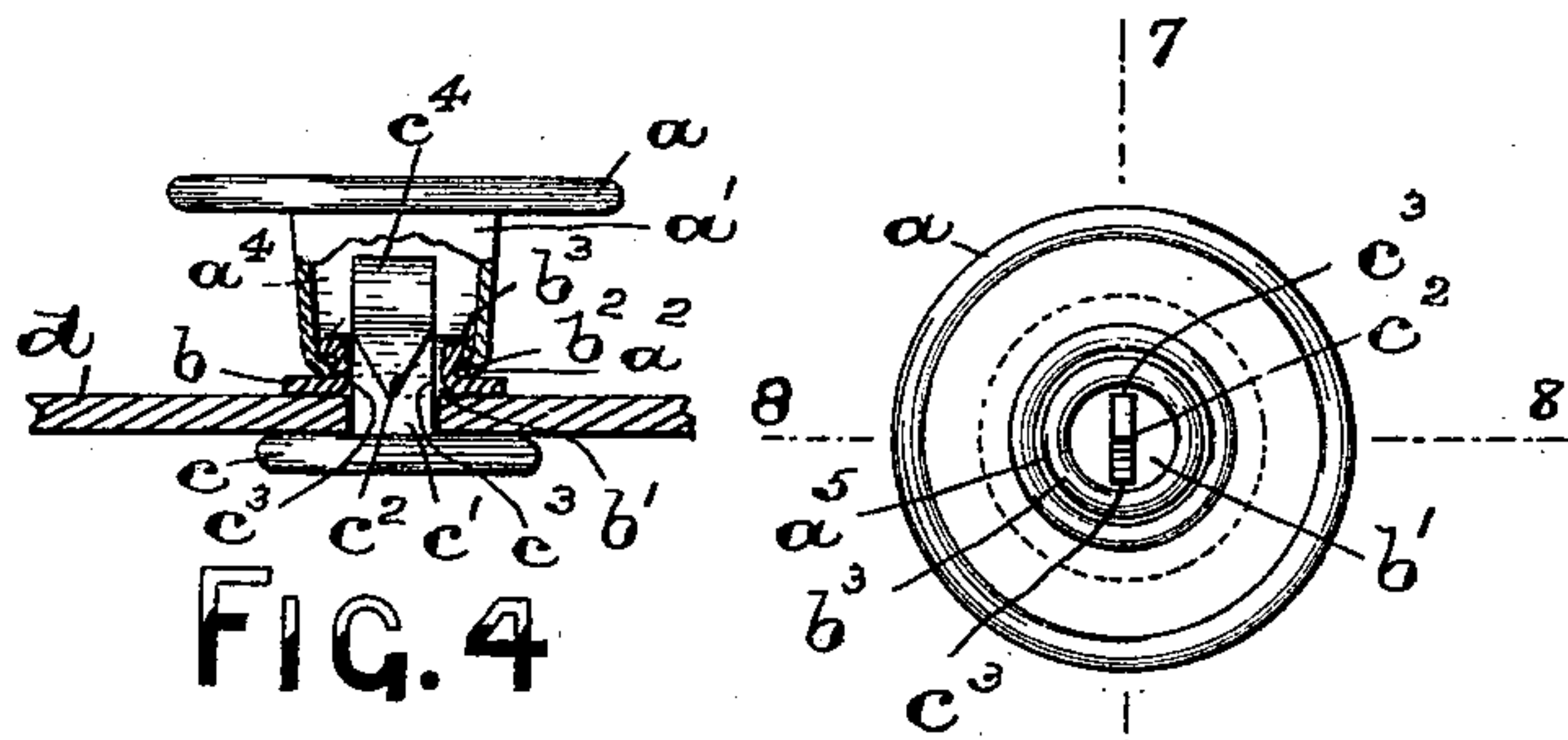


FIG. 4

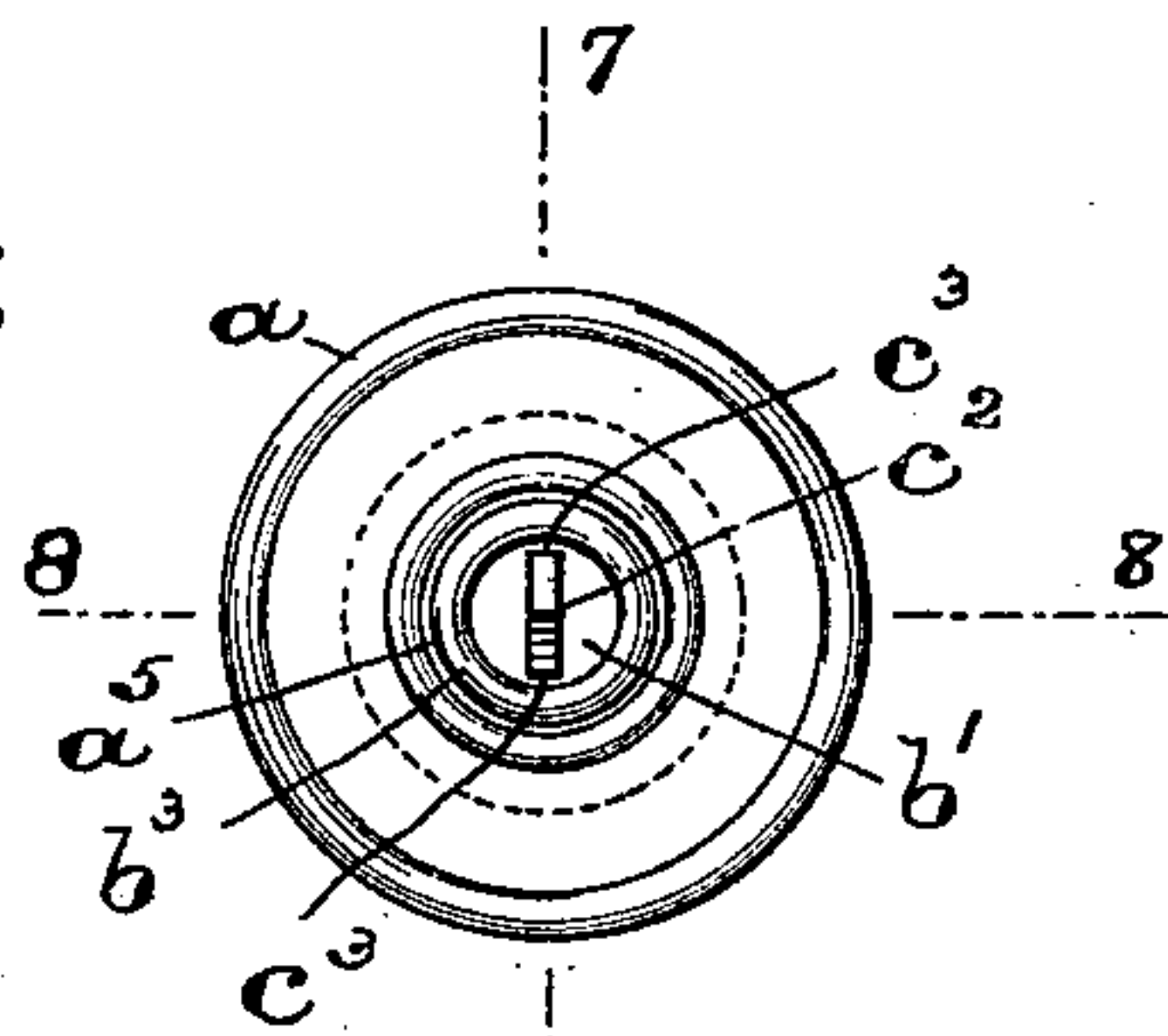


FIG. 5

FIG. 6

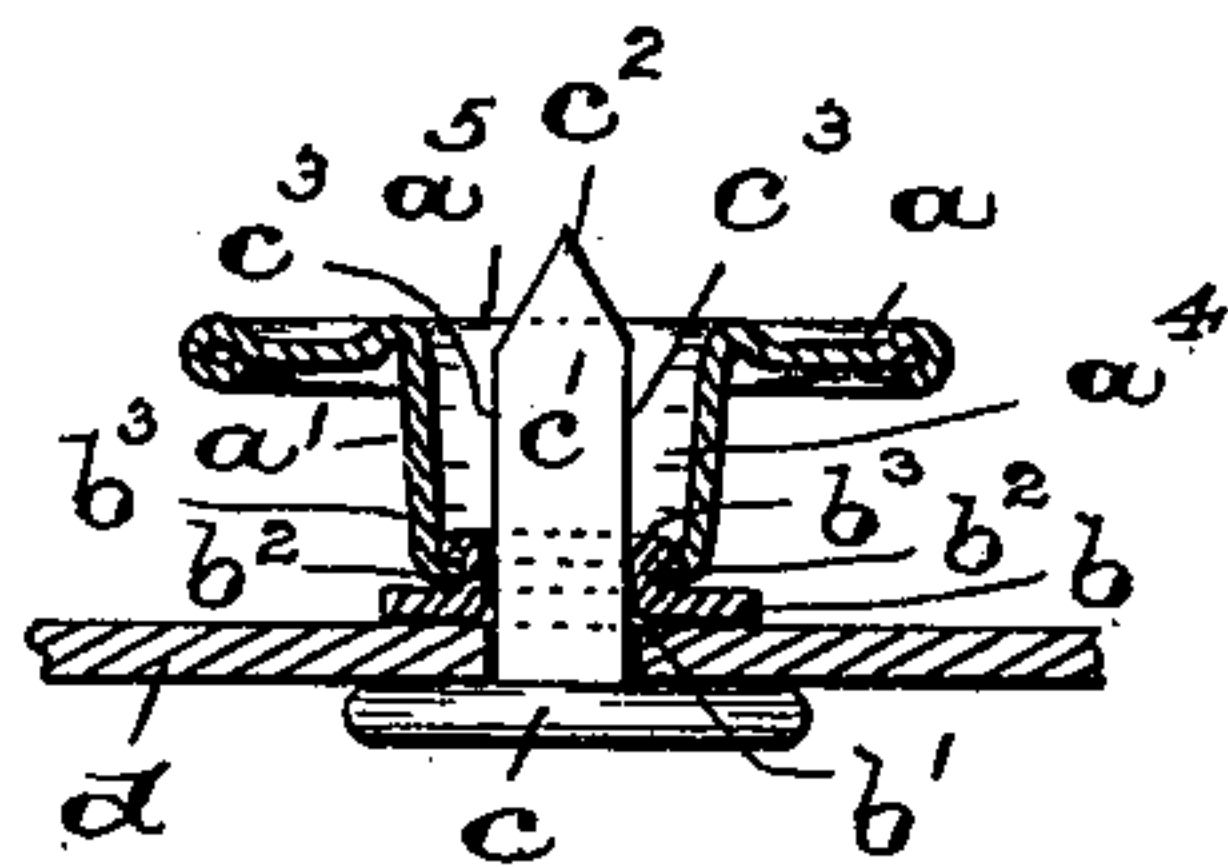


FIG. 7

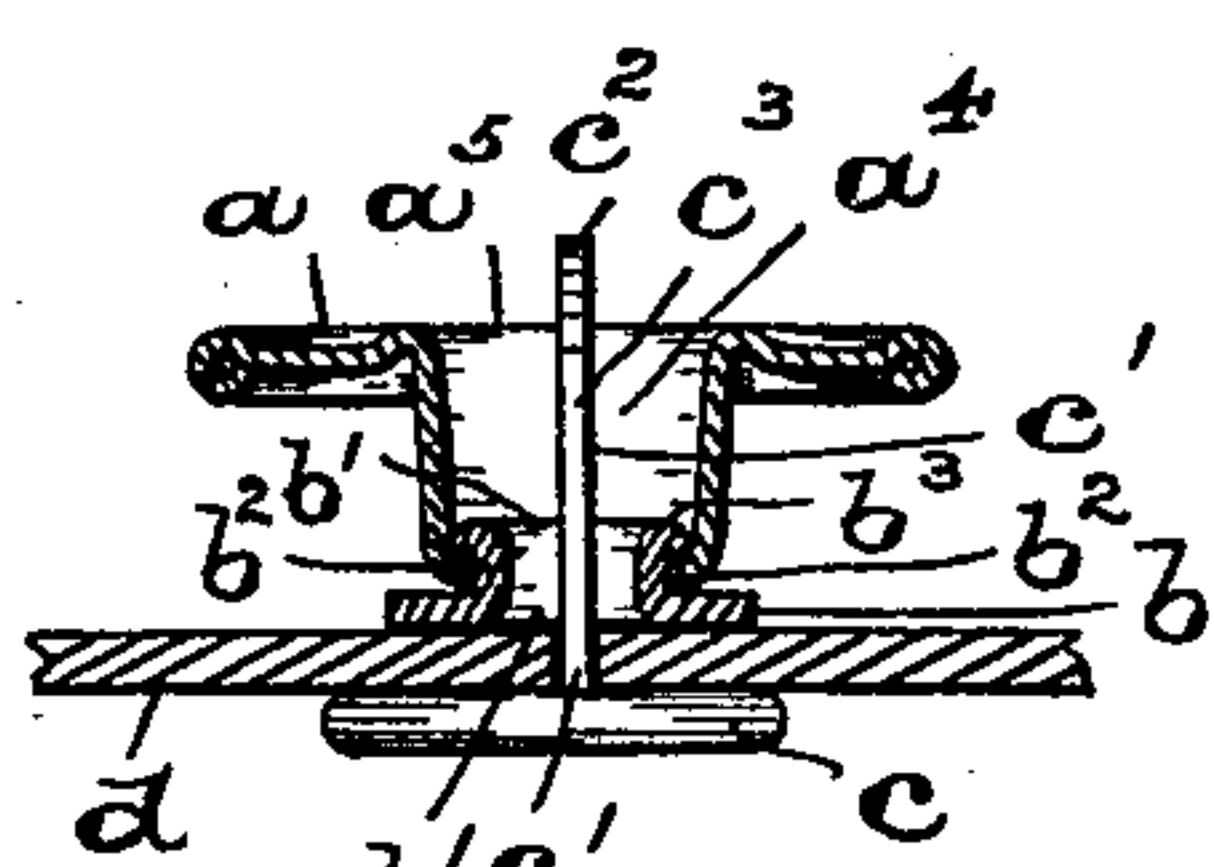


FIG. 8

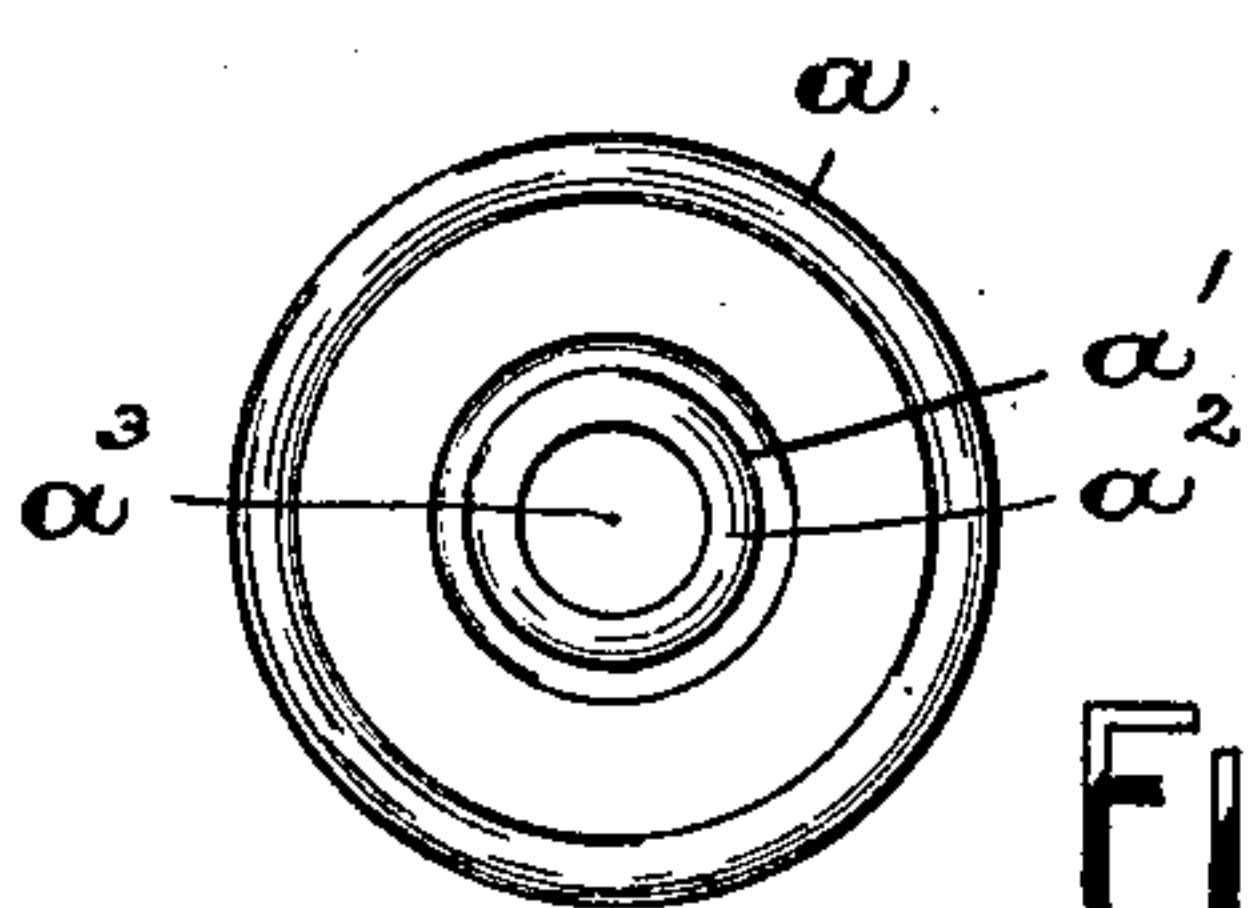


FIG. 9

WITNESSES:

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UNITED STATES PATENT OFFICE.

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BUTTON.

SPECIFICATION forming part of Letters Patent No. 656,214, dated August 21, 1900.

Application filed December 9, 1899. Serial No. 739,750. (No model.)

To all whom it may concern:

Be it known that I, CHARLES RADCLIFFE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Buttons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention has reference to improvements in that class of buttons which are to be attached in position upon a garment without the use of thread and needle; and my present invention has for its primary object to provide a button of the character above set forth which shall be very simple in its general construction and the parts of which can be readily assembled and arranged to secure the face-plate and back-plate of the button in place on the garment in a more rigid and hence in a permanent and lasting position on such garment.

Other objects of this invention are to simplify the general construction of the button, to cheapen its cost of manufacture, and to more readily enable the assembling of the parts of the button with a view of presenting thereby a button which is adapted for use on materials of various thicknesses and is especially adapted for use in connection with very thin pieces of goods.

My invention therefore consists in the novel construction of a button to be hereinafter fully described; and, furthermore, my invention consists in the several novel arrangements and combinations of the various parts, all of which will be fully set forth in detail in the accompanying specification and finally embodied in the clauses of the claim.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a top view, and Fig. 2 a side view, of a button made according to the principles of my present invention. Fig. 3 is a vertical cross-section taken on line 3 3 in Fig. 1, and Fig. 4 is a similar section taken on line 4 4 in said figure, both of said views illustrating the various parts of the button

in their assembled and operative position on a piece of fabric. Fig. 5 represents the face-plate and its hub of a button in vertical section and an eyeleted base-plate, represented in similar section, said parts being illustrated in their relative position about to be secured together. Fig. 6 is a top or plan view of the button, illustrating the position of a flat post connected with the back-plate of the button when inserted in the open or perforated end portion of the hub and before its free end is doubled or turned over in the chambered face-plate of the button to secure the several parts of the button together. Fig. 7 is a vertical cross-section taken on line 7 7 in Fig. 6. Fig. 8 is a similar section taken on line 8 8 in said figure, and Fig. 9 is a bottom or rear view of the face-plate and its open or perforated hub.

Similar letters of reference are employed in all of the said above-described views to indicate corresponding parts.

In the said drawings, A indicates the button, which is composed of a suitable face-plate or upper shell a , provided with a rearwardly-extending hub a' , formed with a rear portion a^2 , which is provided with a suitable opening or perforation a^3 , substantially as illustrated in the several figures of the drawings. The said hub and face-plate of the button, as indicated in the present drawings, are made from one piece of metal, being integrally united, as illustrated; but of course it will be evident that the hub and face-plate may be separately made and secured together in the well-known and usual manner. As shown in the several figures of the drawings, the hub a' thus provides a chamber a^4 , having an opening a^5 , which is centrally located in the face-plate a . Arranged against the outer surface of the said hub a' is what I term a "base-plate" b , preferably of a circular configuration in outline and being of a greater cross area than that of the bottom of said hub a' . As illustrated more especially in Fig. 5 of the drawings, the said base-plate b has a central opening or hole b' , preferably of a circular configuration, which is elongated to form a cylinder b^2 , which is passed into and through the opening a^3 in the rear portion a^2 of the hub a' of the face-plate a and then upset in the manner of an eyelet to form a curved annu-

lar raised portion b^3 in the chamber a^4 , as clearly illustrated in the several figures of the drawings.

The back-plate or shoe of the button is indicated by the reference-letter c , and it is provided with an upwardly-extending post c' , which is pointed, as at c^2 , and said post is made integral with the said back-plate, or it may be made separately therefrom, if desired.

As illustrated more particularly in Figs. 4 and 7, the sides c^3 of said post c' are parallel, or approximately so, and the width of said post c' from side c^3 to side c^3 is the same, or approximately the same, as the internal diameter of the opening b' , formed in the base-plate b and surrounded by the annular shoulder or projection b^2 of the said plate. To secure the hereinabove-described parts of the button directly to the fabric, the said pointed end of the post c' is forced through the fabric d and then passed into and through the hole or opening b' in the base-plate b in the manner clearly indicated in Figs. 6, 7, and 8, causing the upper portion of said post c' to be arranged or placed in the chamber a^4 of the hub and face-plate of the button. A suitably-constructed bending-over or other tool is now inserted in the hole or opening a^5 in the face-plate a , and the said upper portion of said post is bent directly over and doubled upon itself, as indicated in Figs. 1, 3, and 4, thus forming a tubular and loop-shaped end c^4 to the upper part of the post c' , with the pointed end portion c^2 of said post extending downwardly into the opening or hole b' of the base-plate b with said parts of the said post c' within the opening b' , which is surrounded by the shoulder or projection b^2 , arranged side by side in close contact, or nearly so, as will be clearly evident from an inspection of said Fig. 3. In this manner when the upper portion of said post c' has been doubled upon itself the angular edges c^5 now formed by the said doubled-over part or loop c^4 will extend beyond the circumferential edge of the opening or hole b' , as will be clearly seen from Fig. 1 of the drawings, all of which is due to the fact that the upper portion of the post c' being forced outwardly to either side of its centrally-arranged lower portion when viewed from the top forms a square any one of the sides of which will be longer than the corresponding chord (directly beneath said side) of the circle which bounds the said opening or hole b' . When these several parts have thus been easily assembled and when the upper portion of the post c' has been doubled over or bent in the manner above described and as clearly illustrated in the drawings, then the said annular raised portion b^3 , surrounding the said hole or opening b' within the chamber a^4 , serves as a sufficient and positive support for the loop-shaped portion of the post c' , whereby the several parts are firmly connected to produce the completed button A, properly secured on opposite sides of the material d irrespective of the varying thick-

ness of the material to which the button is secured. Furthermore, by the arrangement of the base-plate b , while it considerably strengthens the inner and lower part of the hub a' and prevents to a great extent, during the process of assembling the parts and securing them in position upon the material, the breaking and splitting of the hub, such plate b also serves to more firmly and rigidly secure the button upon the material, owing to the increased clamping or holding surface between said plate b and the shoe or back-plate c , as will be clearly evident.

From the above description of my invention it will be seen that I have devised a construction of button the parts of which can be quickly assembled and arranged in their holding position on fabrics of different thicknesses without which the parts are loosely secured thereon.

By the arrangement of the base-plate, which may be employed with the hub of any other construction of button, all rattling of the parts is obviated and any possibility of the holding parts of the button being pulled through the material is entirely overcome.

I am aware that changes may be made in the several arrangements and combinations of the various parts, as well as in the details of the construction thereof, without departing from the scope of my present invention. Hence I do not limit my invention to the exact arrangements and combinations of the various parts as herein described and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the construction of such parts.

Having thus described my invention, what I claim is—

1. As a new article of manufacture, a button, comprising a face-plate or upper shell and a hub having a hole or opening, a shoe or back-plate, a flat post on said shoe or back-plate arranged in said hole or opening, and, approximately, of the same width as the diameter of said hole or opening, and a doubled-over or looped portion at the top of said post, having its four angular edges extending beyond the circumferential edge of said hole or opening and resting in supporting contact with the surrounding portions of the said opening or hole, substantially as and for the purposes set forth.

2. As a new article of manufacture, a button, comprising a face-plate or upper shell and a hub having a hole or opening, a base-plate having a hole or opening, an annular shoulder or projection on said base-plate extending into the hole or opening in said hub, and having the surrounding edge of the shoulder or projection in holding engagement with a portion of the inner surface of said hub, a shoe or back-plate, a flat post of approximately the same width as the diameter of the said hole or opening in said base-plate, and a doubled-over or looped portion at the top of said post, having portions thereof in hold-

ing engagement with the surrounding edge of the said opening or hole in said base-plate, substantially as and for the purposes set forth.

3. The herein-described button, consisting, 5 essentially, of a face-plate *a*, a hub *a'* having a hole or opening *a³*, a base-plate *b*, of a disk shape of a greater cross area than that of the bottom of said hub, a central hole or opening in said base-plate, and an annular shoulder 10 or projection on said base-plate extending into the hole or opening in said hub, a shoe or back-plate *c*, a post *c'* connected with said shoe or back-plate, having a flat post extending into and through said hole or opening in

said base-plate, and a loop-shaped portion *c⁴* 15 on the upper part of said post, having angular edges *c⁵* resting in supporting contact upon the upper surrounding portion of said annular shoulder or projection on said base-plate, substantially as and for the purposes set forth. 20

In testimony that I claim the invention set forth above I have hereunto set my hand this 7th day of December, 1899.

CHARLES RADCLIFFE.

Witnesses:

FREDK. C. FRAENTZEL,
GEO. D. RICHARDS.