

(No Model.)

C. C. CHAMPENOIS.
BUTTON OR STUD.

No. 605,998.

Patented June 21, 1898.

FIG. 1

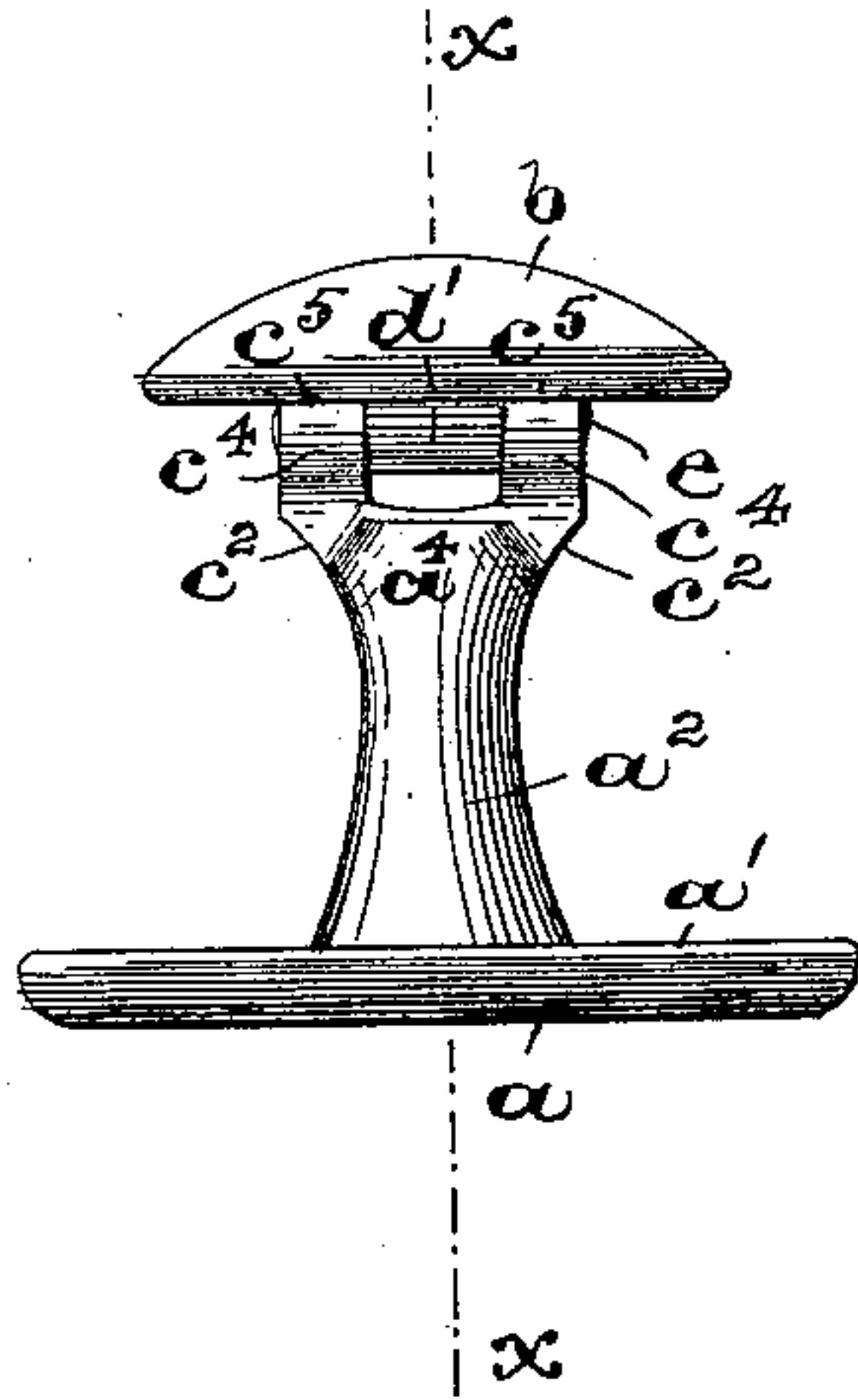


FIG. 2

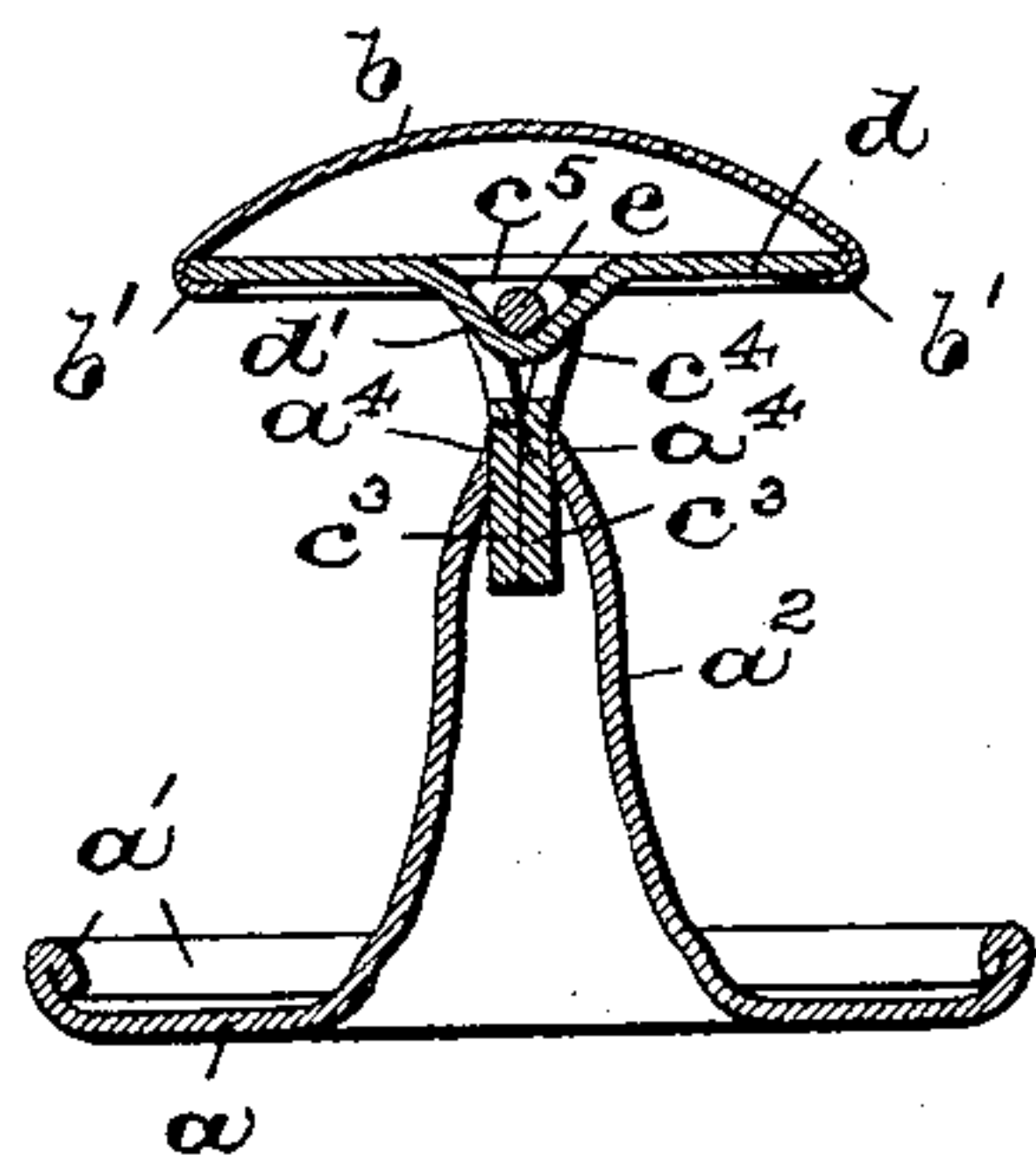
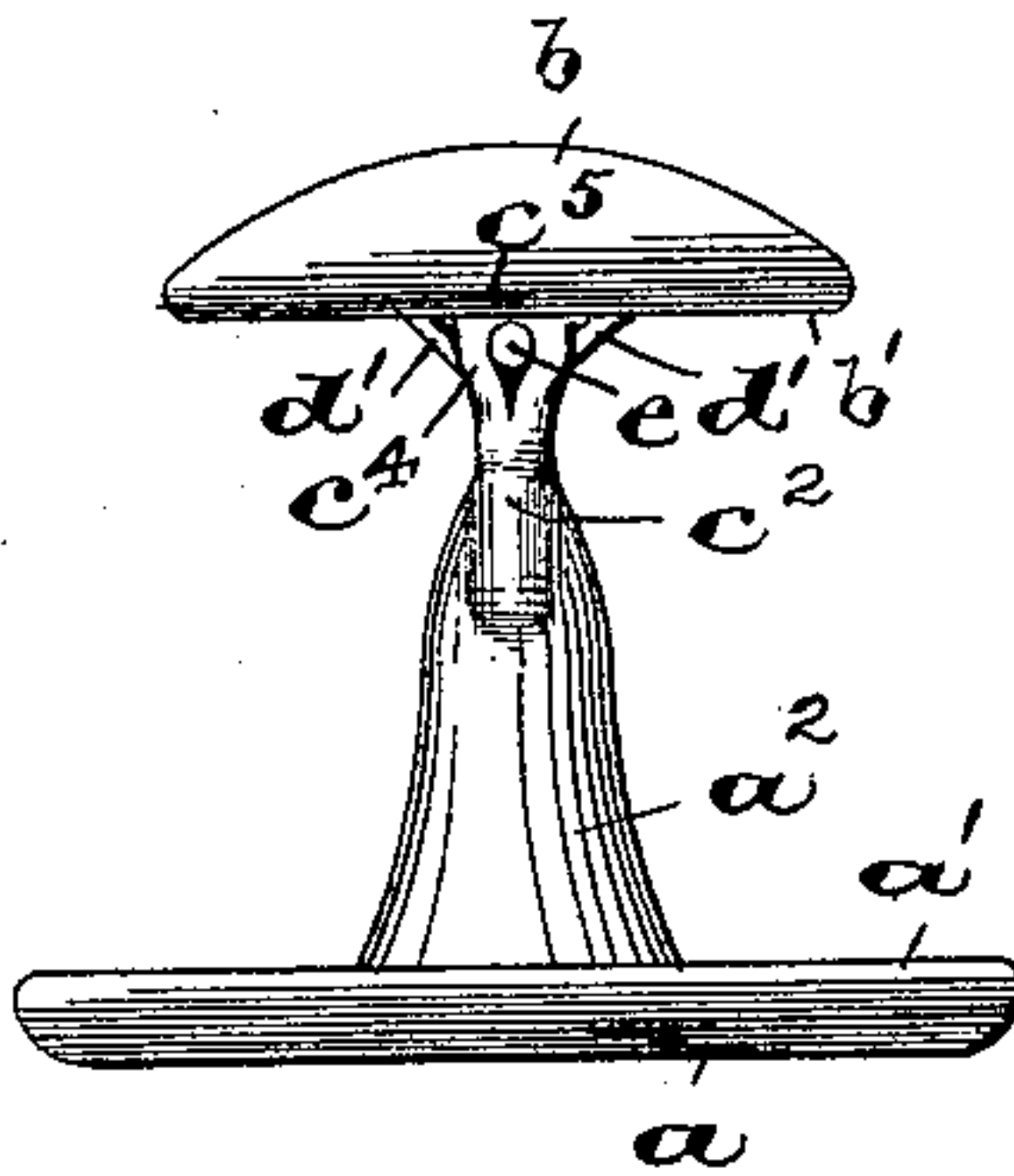


FIG. 3

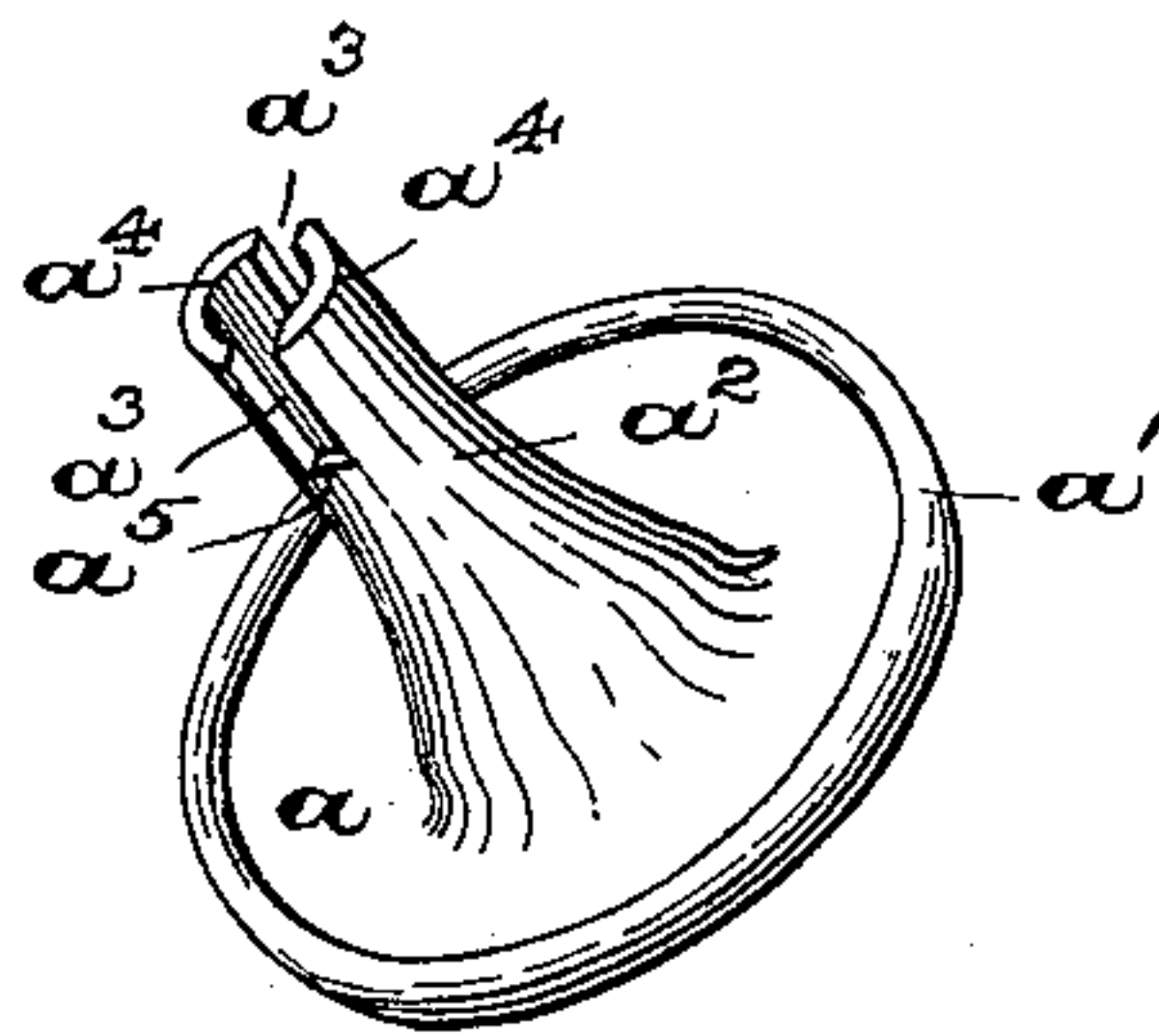


FIG. 5

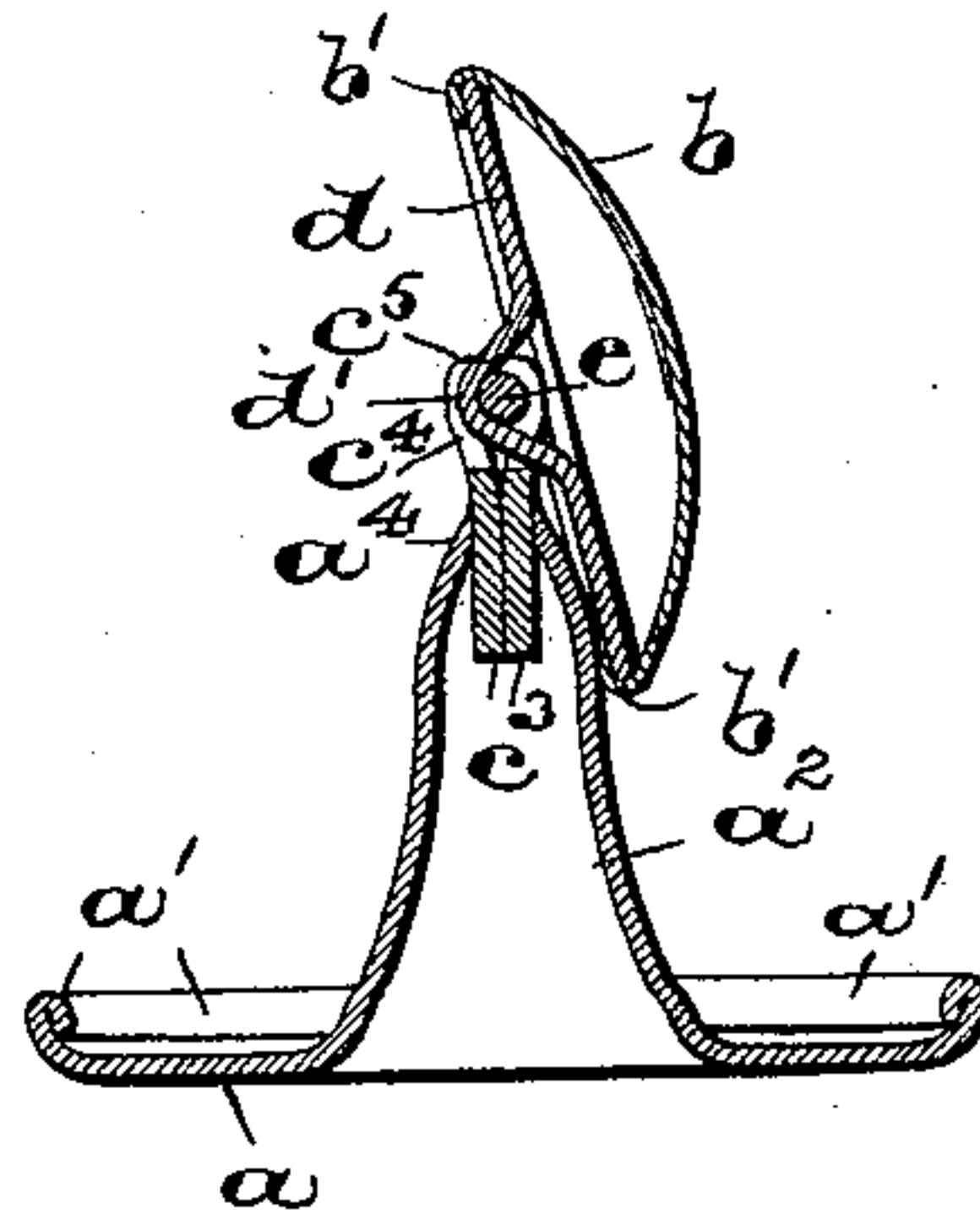


FIG. 4

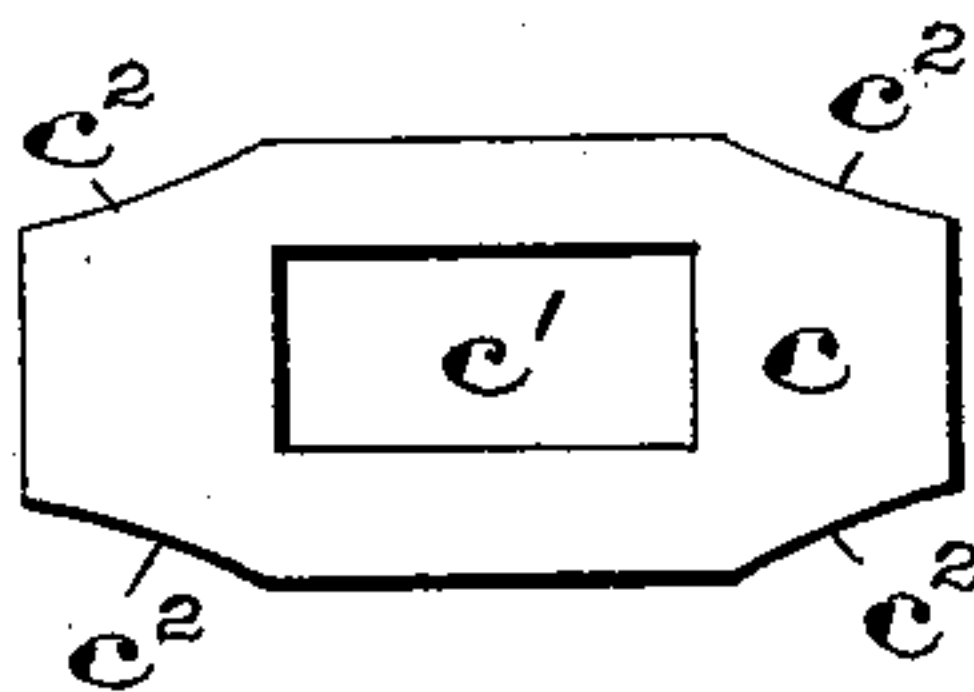


FIG. 6

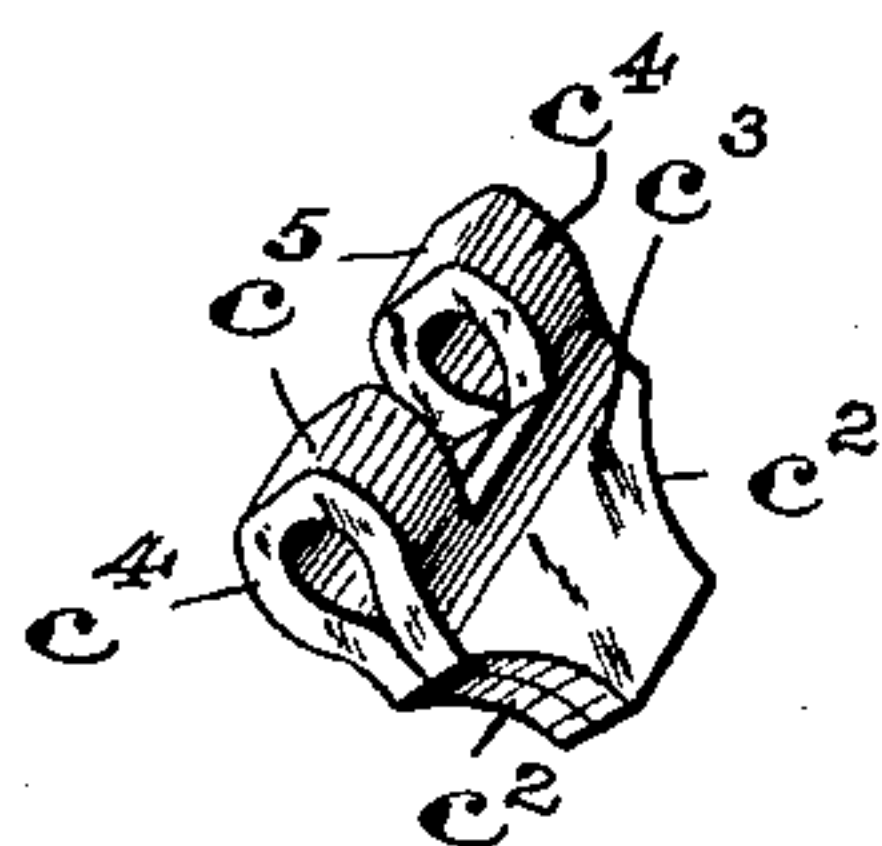


FIG. 7

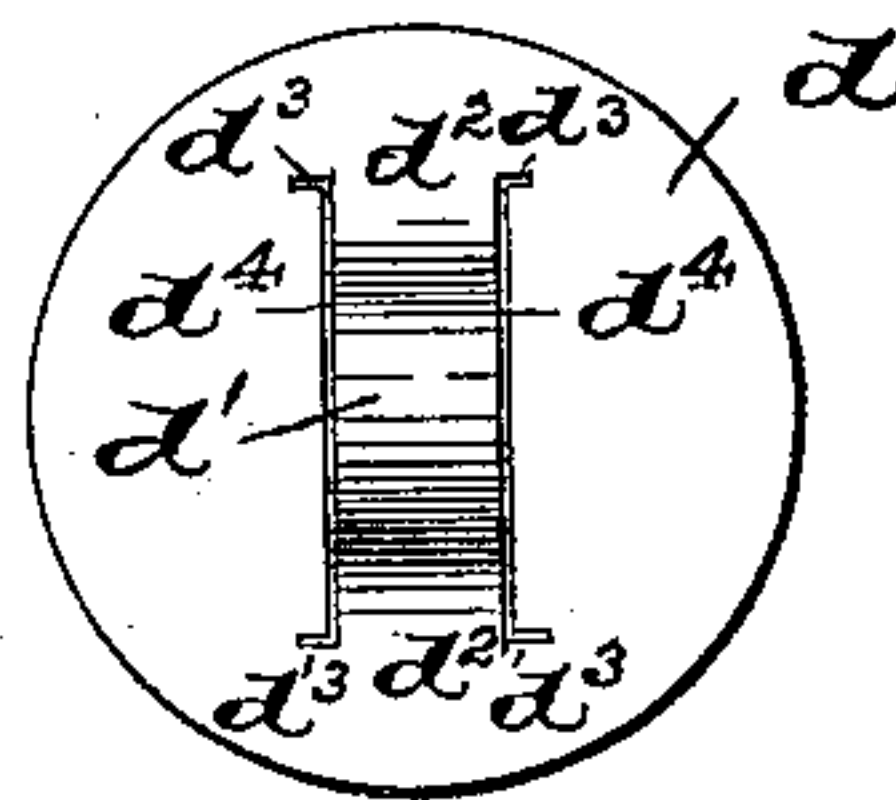


FIG. 8

WITNESSES:

Mr. H. Campfield, Jr.
Marcy J. Trusdell.

INVENTOR:

CHARLES C. CHAMPENOIS,

BY

Fred C. Fraentzel,
ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES C. CHAMPENOIS, OF NEWARK, NEW JERSEY.

BUTTON OR STUD.

SPECIFICATION forming part of Letters Patent No. 605,998, dated June 21, 1898.

Application filed November 6, 1897. Serial No. 657,604. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. CHAMPENOIS, 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 or Studs; 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 buttons of that class provided with a spring-actuated and hinged head and adapted for use as a collar or cuff button or a stud; and the invention has for its primary objects to provide an improved construction for operatively connecting the parts, to greatly simplify and cheapen the cost of construction, and for strengthening the post and back-plate or shoe, and also the spring-plate employed in connection with the head of the button or stud.

My invention therefore consists in the novel construction of button or stud to be hereinafter fully set forth, as well as in the several arrangements and combinations of the parts thereof, especially that of forming the back-plate or shoe and its post in one piece and providing the post with a pair of clamping lugs or jaws, between which is securely fastened a bracket or bearing portion, to which the head is operatively hinged, and, furthermore, that of a spring-plate to be used in connection with the head of the button or stud, said plate having a looped spring portion of the novel construction to be hereinafter fully described.

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

Figures 1 and 2 are a front and side view, respectively, of the complete button or stud; and Figs. 3 and 4 are vertical sections taken on line *x* in Fig. 1, illustrating the head of the button or stud in its two different positions on the pivotal support of the bracket portion. Fig. 5 is a perspective view of the combined back-plate or shoe and post formed integral therewith. Fig. 6 is a plan view of

a blank of metal from which the bracket portion is made, and Fig. 7 is a perspective view of the bracket portion or bearing. Fig. 8 is a plan view of the spring-plate to be used in connection with the head of the button or stud.

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

In said drawings, *a* indicates a back-plate or shoe provided with an annular bead or rim *a'* and with a centrally-arranged hollow post *a²*. For cheapness of construction and greater strength said post *a²* is made integral with the said back-plate *a*, thereby dispensing with the soldering fast of the post to said back-plate. Said post *a²* is provided at its upper and free end with a pair of oppositely-arranged slots *a³*, formed by a pair of oppositely-arranged clamping lugs or jaws *a⁴*, as will be more clearly seen from an inspection of Fig. 5.

The hereinabove-stated bracket portion or bearing is made from a blank *c*, having an opening *c'*, as illustrated in Fig. 6. Said blank is also provided with the curved edges *c²*, and when it is doubled upon itself, as indicated in Fig. 7, a holding portion or post *c³* is formed which is provided with a pair of loops or eyes *c⁴*, substantially as illustrated in said Fig. 7. Said loops or eyes *c⁴* are flattened at the top, as at *c⁵*, for the purposes to be hereinafter described. As will be seen from Figs. 1, 2, 3, and 4, the holding or post portion of said bracket or bearing is inserted in the slots *a³* of the tubular post *a²*, so that the curved parts *c²* of the bracket or bearing will rest upon the edges *a⁵* in said slots *a³*, and the lugs or jaws on said tubular post *a²* will be placed directly against the opposite sides of the holding or post portion *c³* of the bracket. By means of the proper tool the two clamping lugs or jaws *a⁴* are flattened out and firmly closed down against the opposite sides of said holding portion *c³*, and by applying a little solder these parts can be very quickly and securely connected, and when polished will have the appearance as if the back-plate or shoe, its tubular post, and the bracket or bearing were all made in one piece.

The head *b* is of the usual construction and has secured beneath its annular rim, formed

with a head b' , a spring plate or disk d . By means of suitable tools said plate or disk d has forced out in the middle thereof a spring-loop d' , and contiguous with the part d^2 of said loop where it is connected with the main body of the plate or disk d I have provided certain cuts or slots d^3 , formed at right angles or approximately so to the longer slots d^4 in said plate. The purpose of said small cuts or slots d^3 is a very important one, for I have found in practice that where a disk or plate, as d , is taken and formed with the loop d' and without the slots d^3 the connecting metal portions will soon break and render the several parts comprising the button or stud inoperative, while where the slots d^3 are used a greater resiliency of the metal is the result, and in consequence thereof the metal will not give away or break. After the plate or disk d has been secured in the head b , as set forth above, the spring-loop d' is arranged in the space between the two loops or eyes c^4 of the bracket or bearing and a pin or rivet e is employed for pivotally securing the head b and its disk or plate d to the bracket or bearing connected with the post a^2 . From an inspection of Figs. 2 and 3 it will be seen that when the parts are connected the flattened parts c^5 of the said loops or eyes c^4 will firmly bear against the flat surface of the disk or plate d , the loop portion of said plate, owing to its spring action, binding tightly against the pin or rivet e , whereby the head b is tightly held in position upon the bracket or bearing portion of the post and can be forcibly turned in any desired position to permit the button or stud to be easily inserted in the buttonhole of the garment.

From the above description it will be evident that by my improved post and back-plate or shoe I dispose with the soldering fast of the post to the back-plate, whereby a saving in cost and time in the manufacture of the button is the result and a stronger device is made, and, furthermore, by the arrangement of the slots d^3 in the plate or disk d a greater resiliency of the spring-loop is the result, and there is no danger of the same breaking when in constant use, as is the case in the constructions of spring-plates made without said slots d^3 .

Having thus described my invention, what I claim is—

1. A button or stud, comprising a back-plate or shoe and a tubular post formed integral therewith, said post having slots a^3 , and a pair of clamping lugs or jaws a^4 , a bracket or bearing having a post portion arranged in said tubular post and fitted in said slots a^3 and said lugs or jaws being clamped and secured against the sides of said post portion of the bracket or bearing, and a head pivotally connected with said bracket or bearing, substantially as and for the purposes set forth.

2. A button or stud, comprising a back-plate or shoe and a tubular post formed integral therewith, said post having slots a^3 , and a pair of clamping lugs or jaws a^4 , a bracket or bearing having a post portion arranged in said tubular post and fitted in said slots a^3 and said lugs or jaws being clamped and secured against the sides of said post portion of the bracket or bearing, a pair of loops or eyes c^4 connected with said bracket or bearing, said loops or eyes having flattened surfaces c^5 , a spring plate or disk d , having a loop d' pivotally arranged on a pin or rivet in said loops c^4 , and a head b secured to said plate or disk d , substantially as and for the purposes set forth.

3. A button or stud, comprising a back-plate or shoe and a tubular post formed integral therewith, said post having slots a^3 , and a pair of clamping lugs or jaws a^4 , a bracket or bearing having a post portion arranged in said tubular post and fitted in said slots a^3 and said lugs or jaws being clamped and secured against the sides of said post portion of the bracket or bearing, a pair of loops or eyes c^4 connected with said bracket or bearing, said loops or eyes having flattened surfaces c^5 , a spring plate or disk d , having a loop d' pivotally arranged on a pin or rivet in said loops c^4 , and said disk or plate d having slots d^3 contiguous to the ends of the loop d' , and a head b secured to said plate or disk d , substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 3d day of November, 1897.

C. C. CHAMPENOIS.

Witnesses:

FREDK. C. FRAENTZEL,
WM. H. CAMFIELD, Jr.