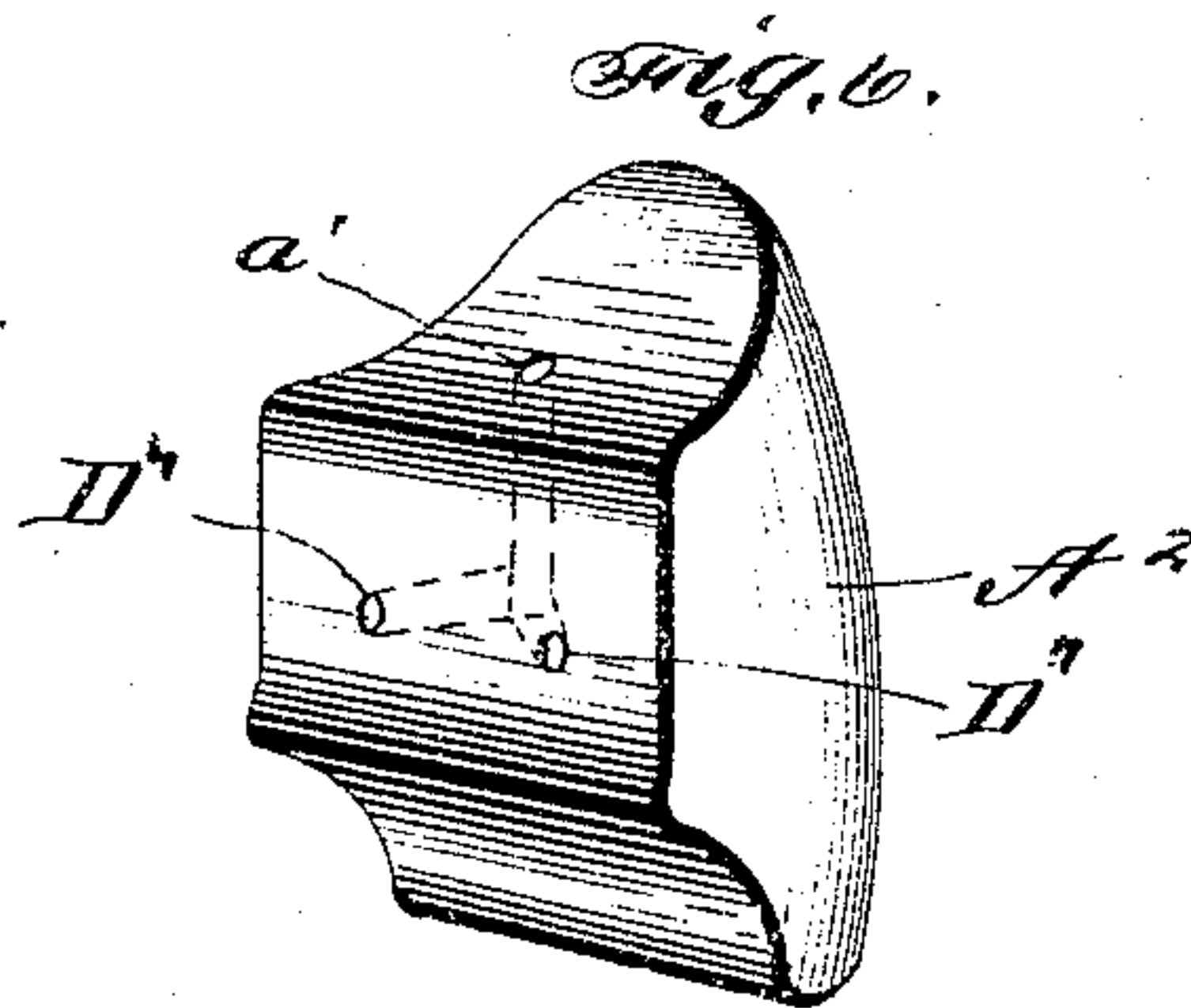
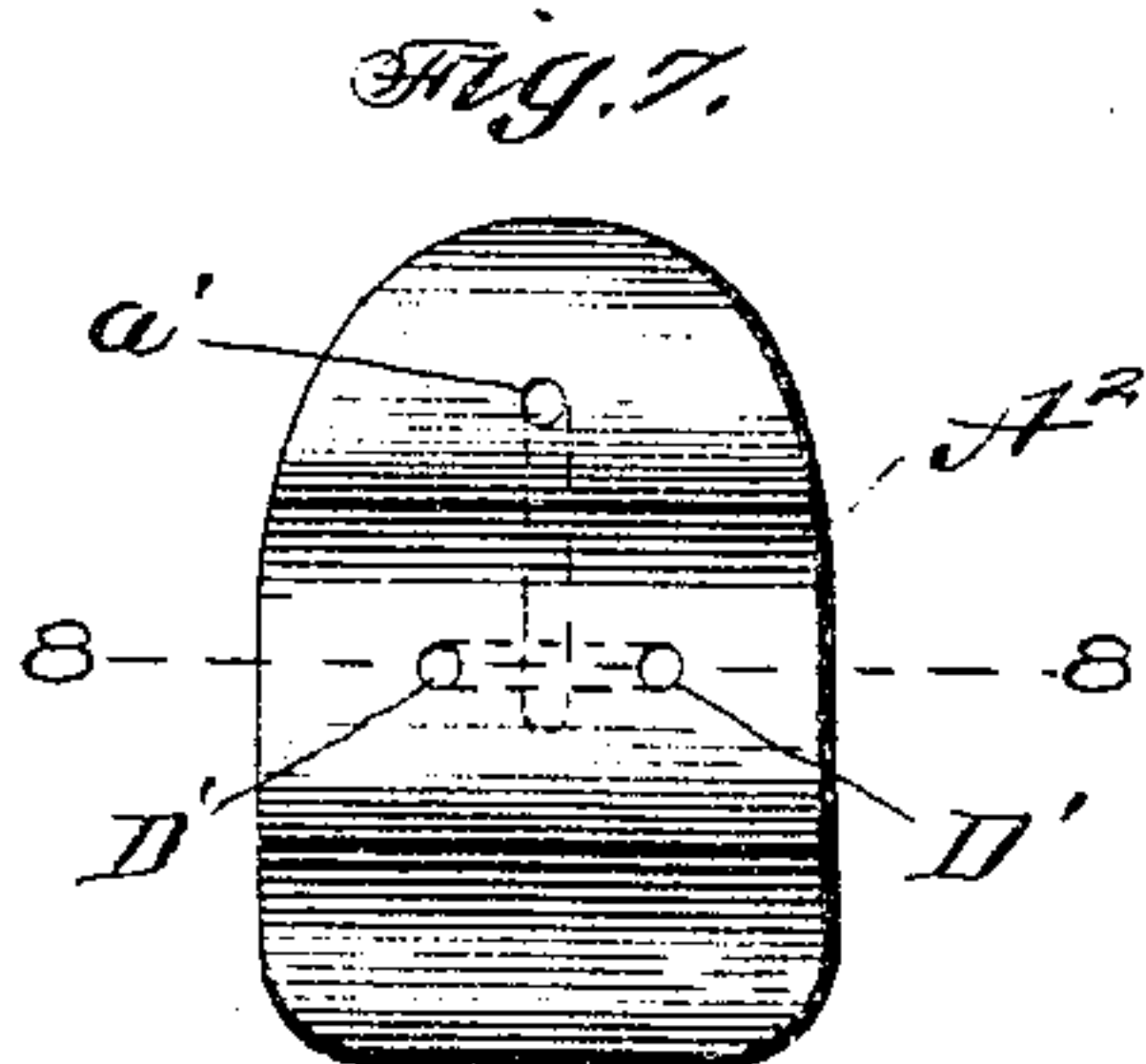
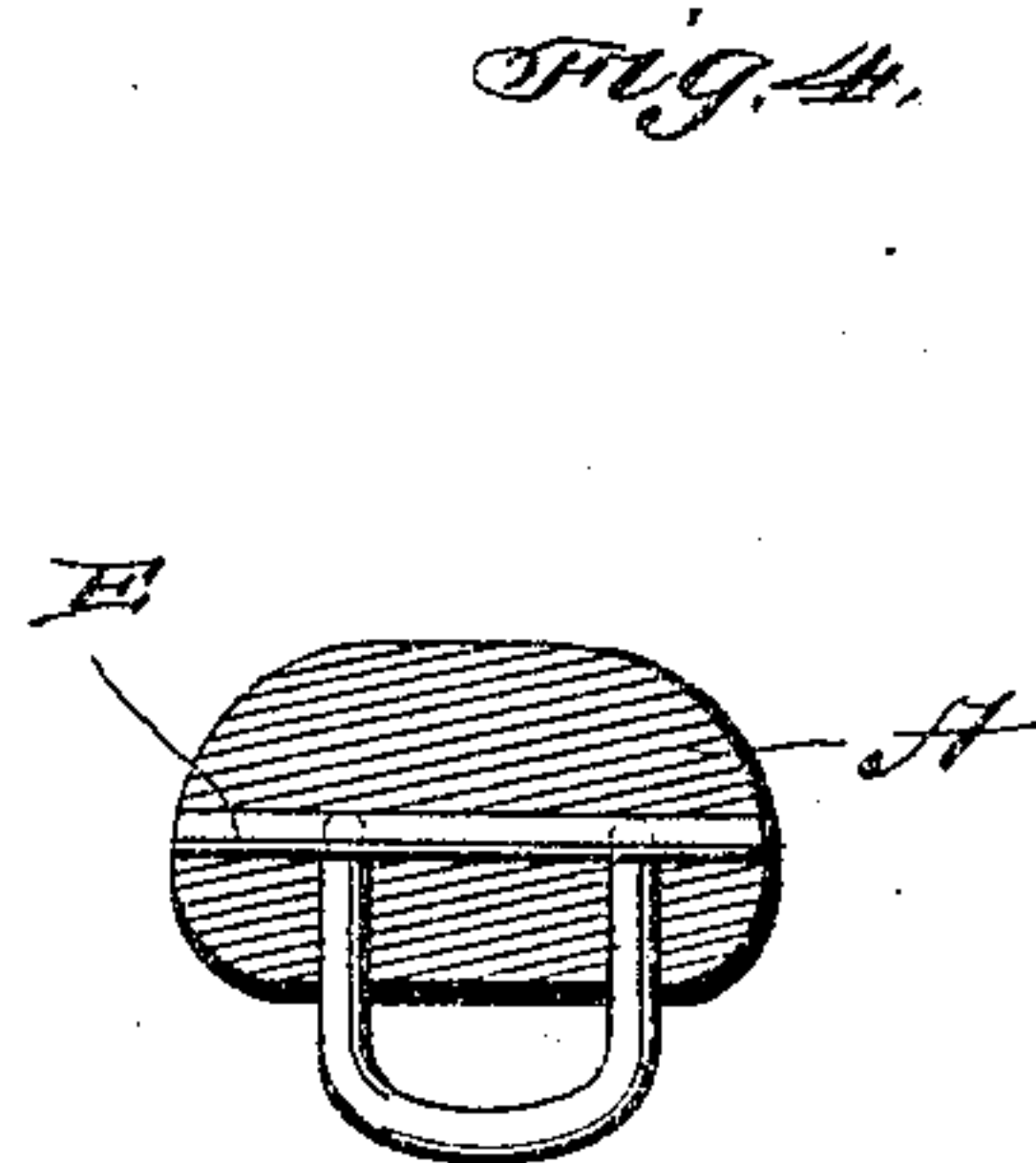
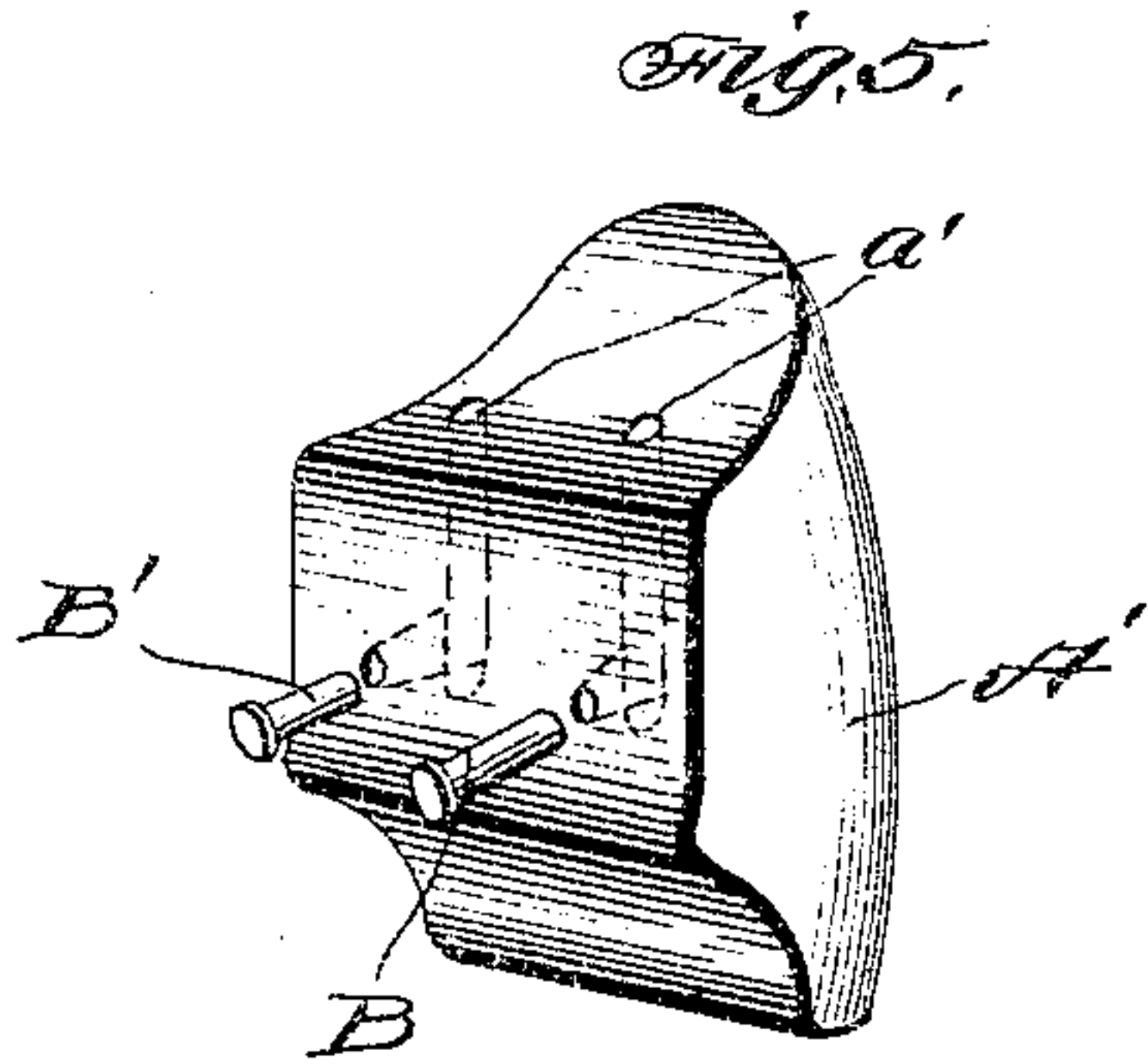
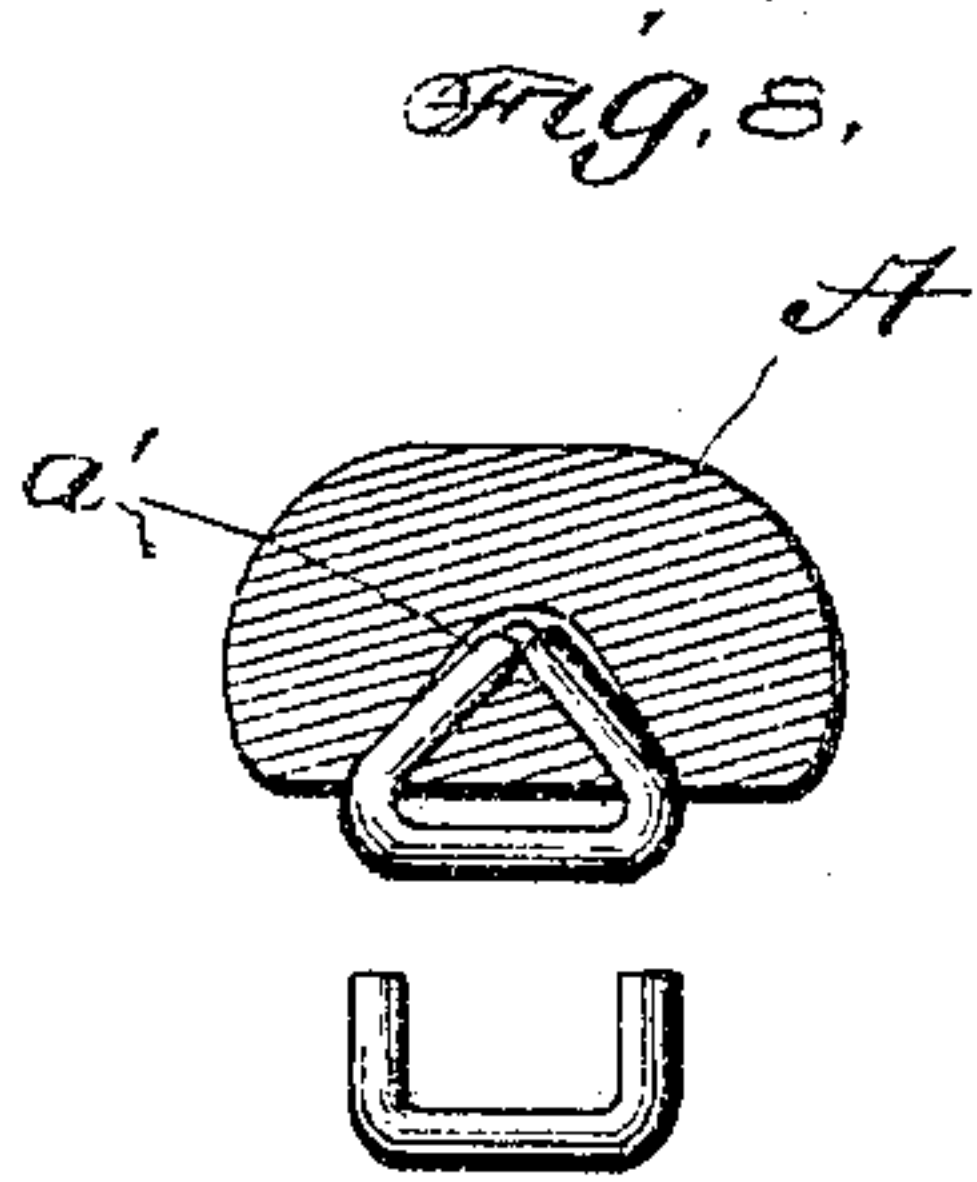
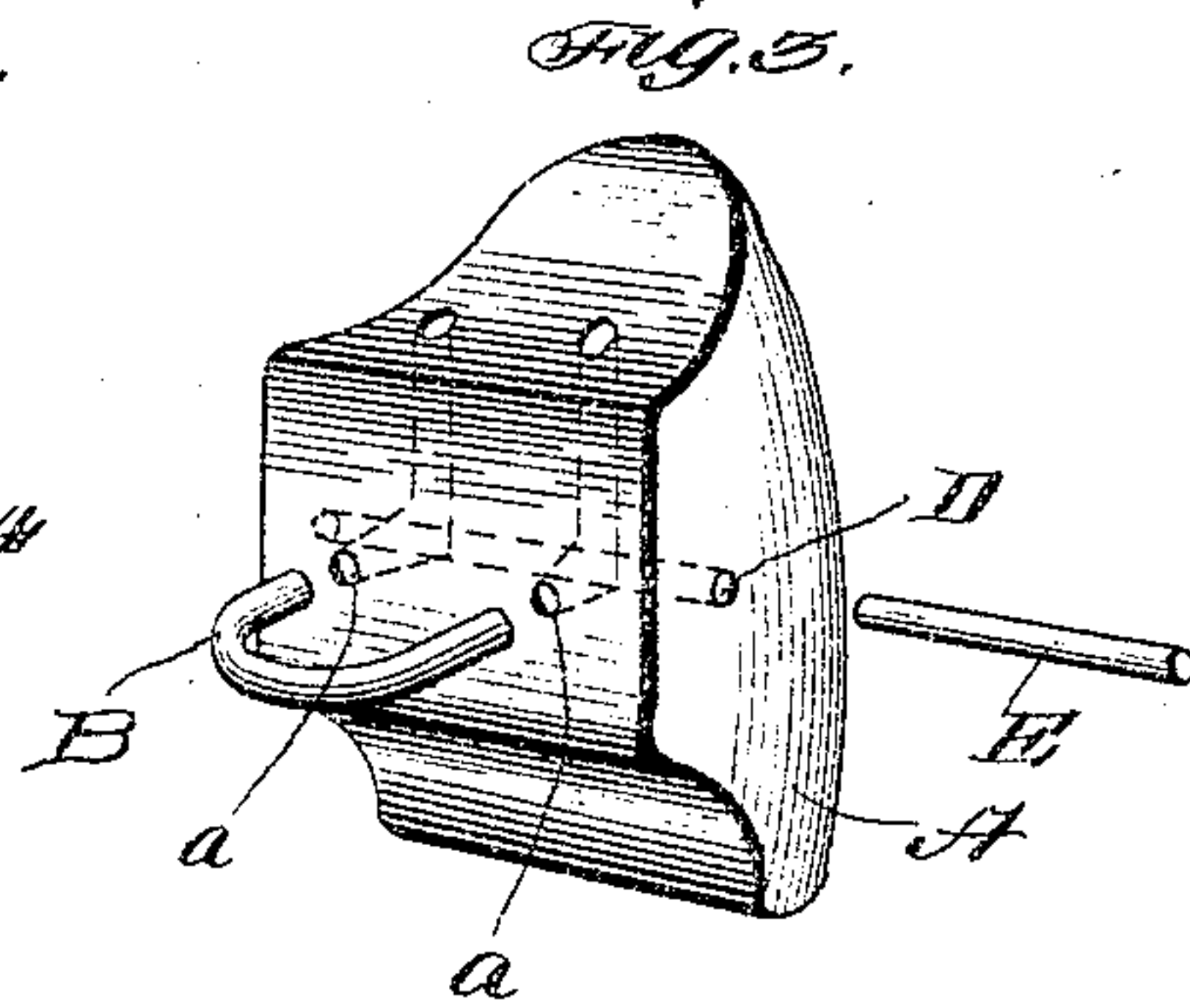
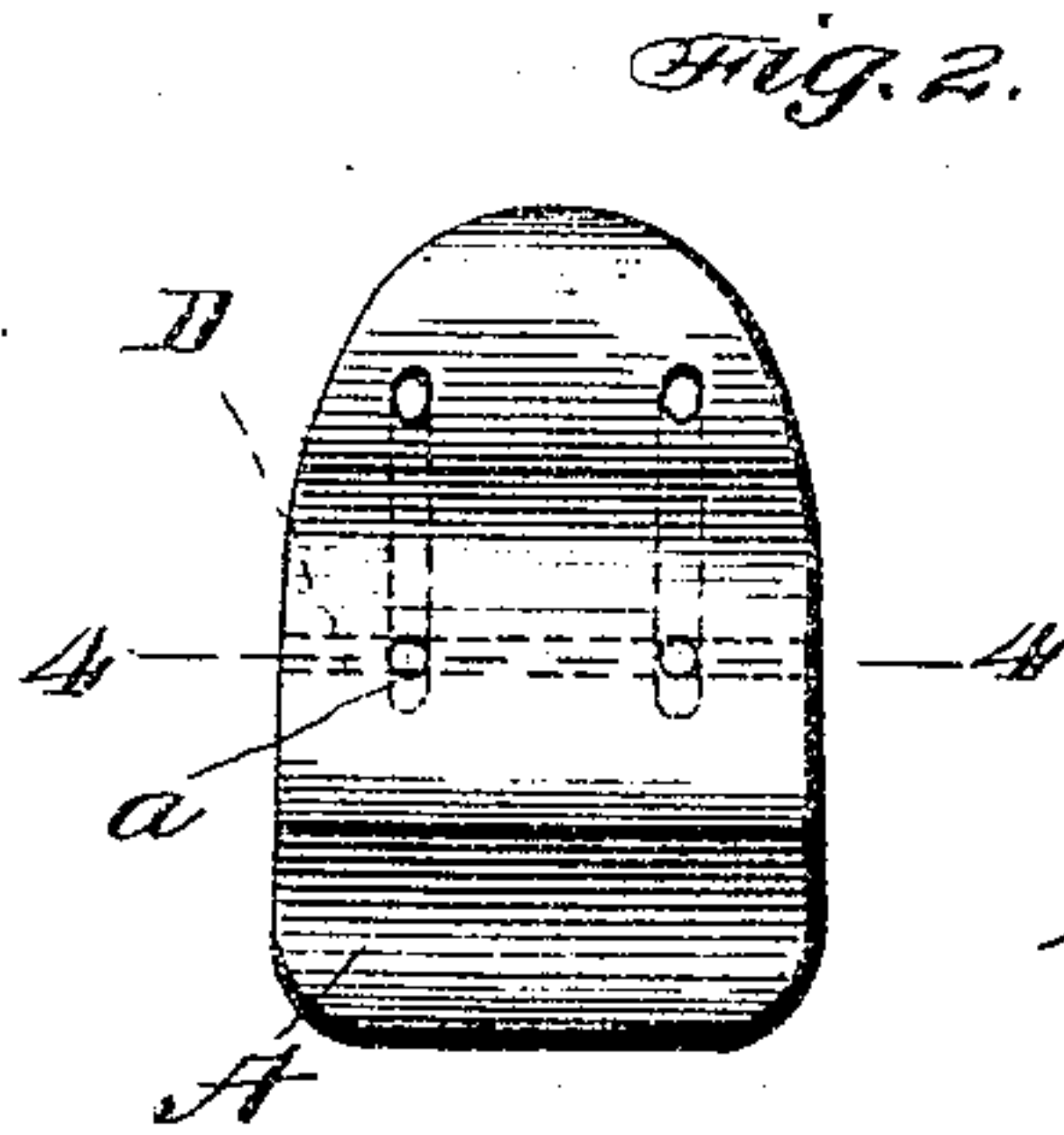
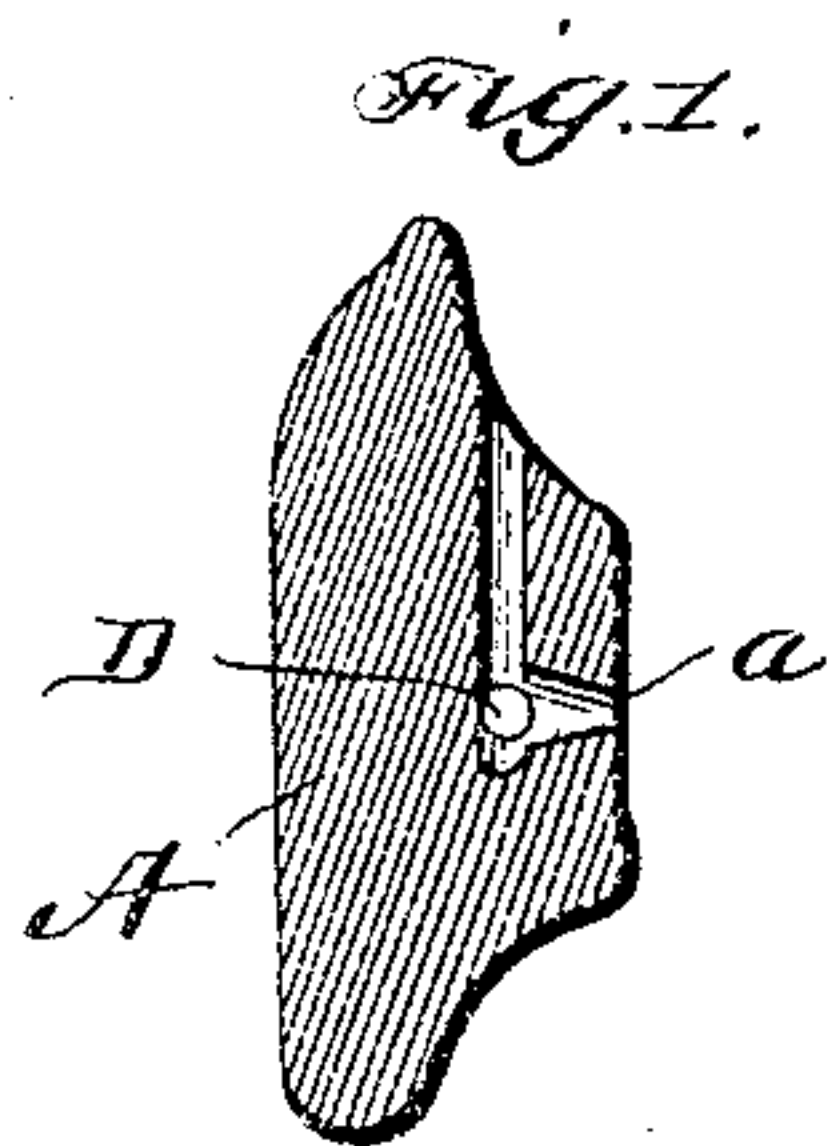


No. 774,045.

PATENTED NOV. 1, 1904.

C. A. DAVIS.
ARTIFICIAL TOOTH.
APPLICATION FILED NOV. 13, 1902.

NO MODEL.



Witnesses

R. A. Boswell,
a. L. Hough

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Inventor
Charles A. Davis,
Franklin H. Hough
Attorney

UNITED STATES PATENT OFFICE.

CHARLES A. DAVIS, OF PASADENA, CALIFORNIA.

ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 774,045, dated November 1, 1904.

Application filed November 13, 1902. Serial No. 131,160. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. DAVIS, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Artificial Teeth; and I do 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in artificial dentures; and it consists in novel means for fastening pins or staples to artificial teeth after the latter have been baked.

The invention consists, further, in the provision of means whereby the cost of manufacture of teeth is appreciably reduced by dispensing with the use of platinum and substituting therefor a metal less expensive and fully as efficient if not stronger than platinum pins.

The invention consists, further, in various details of construction and in combination of parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts in the views, in which—

Figure 1 is a central longitudinal section through an artificial tooth, showing the arrangement of apertures formed therein for the reception of pins and fastening means. Fig. 2 is a rear elevation of the tooth shown in Fig. 1. Fig. 3 is a perspective view of the tooth with staple-pin in readiness to be inserted in the apertures or holes of the tooth. Fig. 4 is a cross-sectional view through the tooth, showing the manner of securing the staple-pin. Fig. 5 is a view showing a slightly-modified form in which the transversely-disposed retaining-wire is dispensed with and pins being employed instead of the staple, as shown in

Fig. 3. Fig. 6 is a modified form showing two converging holes through which the ends of a staple are adapted to pass. Fig. 7 is a rear elevation of the form shown in Fig. 6. Fig. 8 is a cross-sectional view on line 8 8 of Fig. 7.

Reference now being had to the details of the drawings by letter, A designates an artificial tooth having preferably two holes *a a* formed transversely therein from the rear face of the tooth and spaced apart. The walls of said holes taper slightly and have greater diameters at their inner portions than at the openings therein, thus leaving a space about the inner portion of the staple or pin for the reception of solder adapted to adhere to the end or ends of the pins, thus forming a secure anchorage for the latter in the holes. Holes *a' a'* are formed in the tooth and disposed at right angles to said holes *a*, into which they open, as shown. Said holes *a'* open through the face of the tooth opposite its biting edge and are designed to receive solder which after the pins are in place is adapted to be heated and after melting adhere to the ends of the pin or pins. The lower ends of said holes *a'*, as will be observed upon examination of Fig. 1 and Fig. 5, extend slight distances beyond the horizontally-disposed holes *a* to form small pockets into which the solder is designed to run to form a secure anchorage in retaining the staple or pins in said holes *a*.

Passing transversely through the tooth is an aperture D, which is formed at a location to intersect the holes *a'* and *a* where they come together. Into said aperture D a wire E of metal is adapted to be inserted before the ends of the staple or pins are adjusted in place. When said wire has been inserted in the aperture D, the ends of the staple are brought into contact with the wire and the solder previously inserted in the holes *a'* melted and allowed to run down to adhere to the ends of the staple or pin and fill the space about the pins and the pockets formed at the inner ends of holes *a'*.

In Fig. 5 I have shown a slightly-modified form of fastening the pins to the tooth, in which I dispense with the horizontally-dis-

posed aperture shown in Figs. 3 and 4 and also with the wire to which the staple or pins is fastened, and instead I propose in said modification to anchor the inner ends of the pins
5 B', or, if a staple is used, to anchor the ends thereof to solder, which is inserted through the holes D a.

In Figs. 6, 7, and 8 I have shown a still further modification, in which the holes D' D'
10 are formed substantially at right angles to each other and come together at their inner ends, and a single hole a' is formed longitudinally through a portion of the tooth and opens into said holes D' at their point of junction.
15 In this modification I have shown a staple which before being forced into said holes D' has its ends parallel with each other; but as the staple is forced into the tooth the ends are made to converge by contact with the
20 walls of the holes D' and come together at their inner ends, as illustrated in Fig. 8. When thus adjusted in place, solder may be melted in the hole a' and allowed to run down on the ends of the previously-fluxed pin or
25 staple and securely adhere thereto, forming a secure anchorage thereto.

In the latter-referred-to modification it will be understood that pins may be substituted
30 made without departing from the spirit of the invention.

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

1. An artificial tooth having a chamber 35 formed therein with converging apertures opening through the rear wall of the tooth and communicating with said chamber, a pivot-pin, the ends of which are positioned in said converging apertures, said tooth having an
40 aperture opening through the top of the tooth and communicating with the chambered portion, said chambered portion extending below the apertures which receive the ends of the pivot-pin, and means for anchoring the same
45 in the tooth, as set forth.

2. An artificial tooth having a chamber formed therein with converging apertures opening through the rear wall of the tooth and communicating with said chamber, a pivot-
50 pin, the ends of which are positioned in said converging apertures, an anchoring-pin seated in apertures in the tooth and designed to be soldered to the inner ends of said pivot-pin, as
55 set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CHARLES A. DAVIS.

Witnesses:

A. L. HOUGH,
FRANKLIN H. HOUGH.