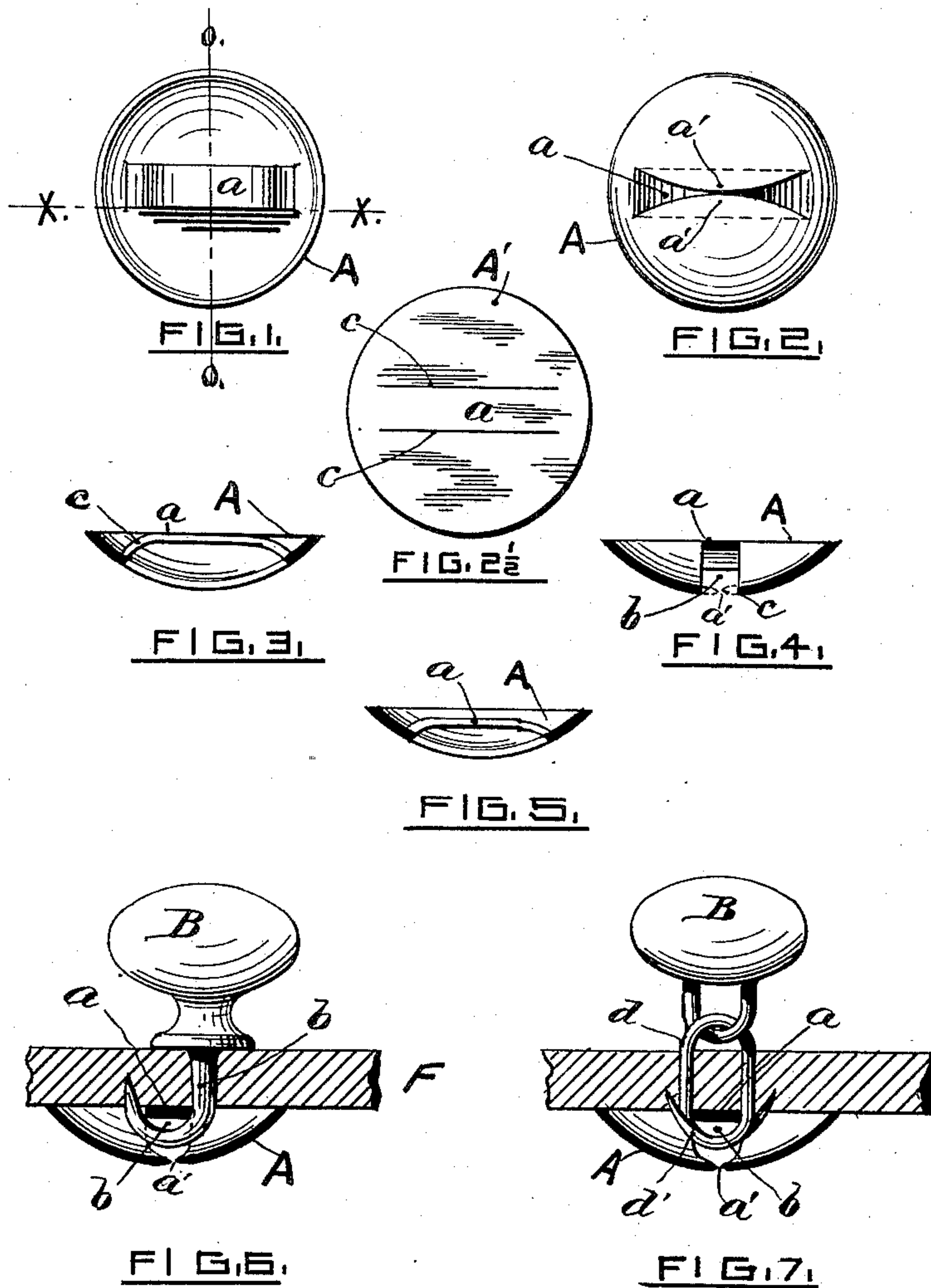


(No Model.)

J. F. THAYER.
BUTTON FASTENER.

No. 298,796.

Patented May 20, 1884.



WITNESSES,

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UNITED STATES PATENT OFFICE.

JAMES F. THAYER, OF PROVIDENCE, RHODE ISLAND.

BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 298,796, dated May 20, 1884.

Application filed January 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. THAYER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Button-Fasteners; 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 or figures of reference marked thereon, which form a part of this specification.

My invention relates to button-fastenings; and it consists of a concavo-convex metallic plate or washer provided with a bar or tie across the concave side thereof, said bar being formed and raised from the plate, whereby the prongs of a button or staple, when combined with said plate, are deflected and bent beneath said bar and above the inner surface of the plate.

My invention also consists in swaging or extending the inner edges of the opening of the plate exposed after forming said bar, thereby partially filling or closing said opening, all as will be fully hereinafter set forth.

In the annexed sheet of drawings, Figure 1 represents (enlarged) a plan view of my improved button-fastening plate or washer, showing its inner or concave surface. Fig. 2 represents its convex surface, showing the opening therein partially closed. Fig. 2½ represents the blank from which the plate with its tie is formed. Fig. 3 represents a vertical section through *x x* of Fig. 1. Fig. 4 represents a vertical section through *o o* of Fig. 1. Fig. 5 represents a modified form of the tie. Figs. 6 and 7 represent buttons attached to fabrics in combination with my improved clinching-plate.

The following is a detailed description of my invention and the manner of using the same. At the outset, however, I would state that I do not claim, broadly, as my invention a concave washer or plate adapted to deflect the prongs of a button or of a staple, as such have been previously made and used. My invention consists of the plate or washer A, made from a sheet-metal blank, A', Fig. 2½, and afterward shaped to a concavo-convex form, as shown. Upon each side of the cen-

ter of the said blank, at *c c*, the stock is cut nearly across, (also shown in Fig. 2½,) the portion *a*, lying between the cuts, being adapted to be bent or shaped as shown in Fig. 3. By a subsequent process the edges *c* of the opening *b* are swaged or shaped by suitable means, thereby practically closing said opening *b*. (See Figs. 2, 6, and 7.) It is now obvious, in attaching buttons, that the points of the prongs of a button or staple, when forced against the concave side of the plate A, will be bent and deflected inwardly and under the tie *a*, as fully shown completely attached to the fabric in Figs. 6 and 7, the washer at the same time concealing the prongs. The bar *a* of said washer is preferably formed flush with the concave outer edge of the washer, thereby adapting it to rest firmly against the fabric, as shown, thus presenting a large and strong retaining-surface.

Buttons secured to fabrics or leather in connection with my improved clinching-plate also present a more attractive and desirable appearance.

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

1. As an improved article of manufacture, a prong-deflecting washer or plate having one or more integral bars formed upon its concave side, and also having the edges of the openings therein swaged or elongated, as and for the purpose set forth.

2. The metallic concavo-convex plate A, herein described, provided with the bar *a* upon its concave side, and further provided with the swaged or elongated edge *a'*, the whole formed from a single blank, substantially as shown.

3. In a button-fastening, the combination, with a pronged button or staple, of the concavo-convex plate A, having the bar or tie *a* formed integral with said plate, the edges *c* of the opening *b* being swaged or extended at *a'*, the whole arranged and adapted to deflect and conceal the prongs, substantially as shown and described.

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES F. THAYER.

Witnesses:

WM. R. DUTEMPLE,
GEO. H. REMINGTON.