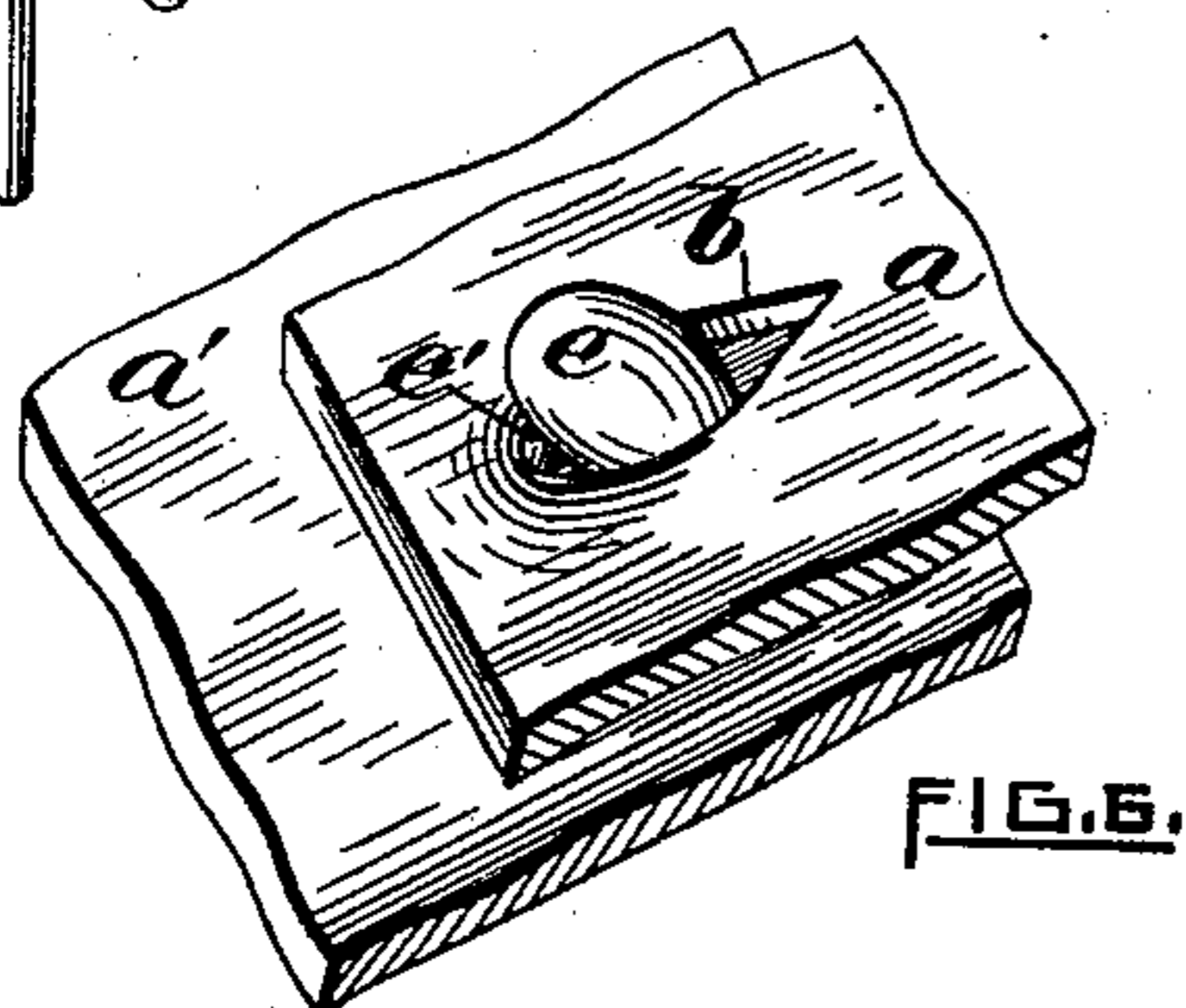
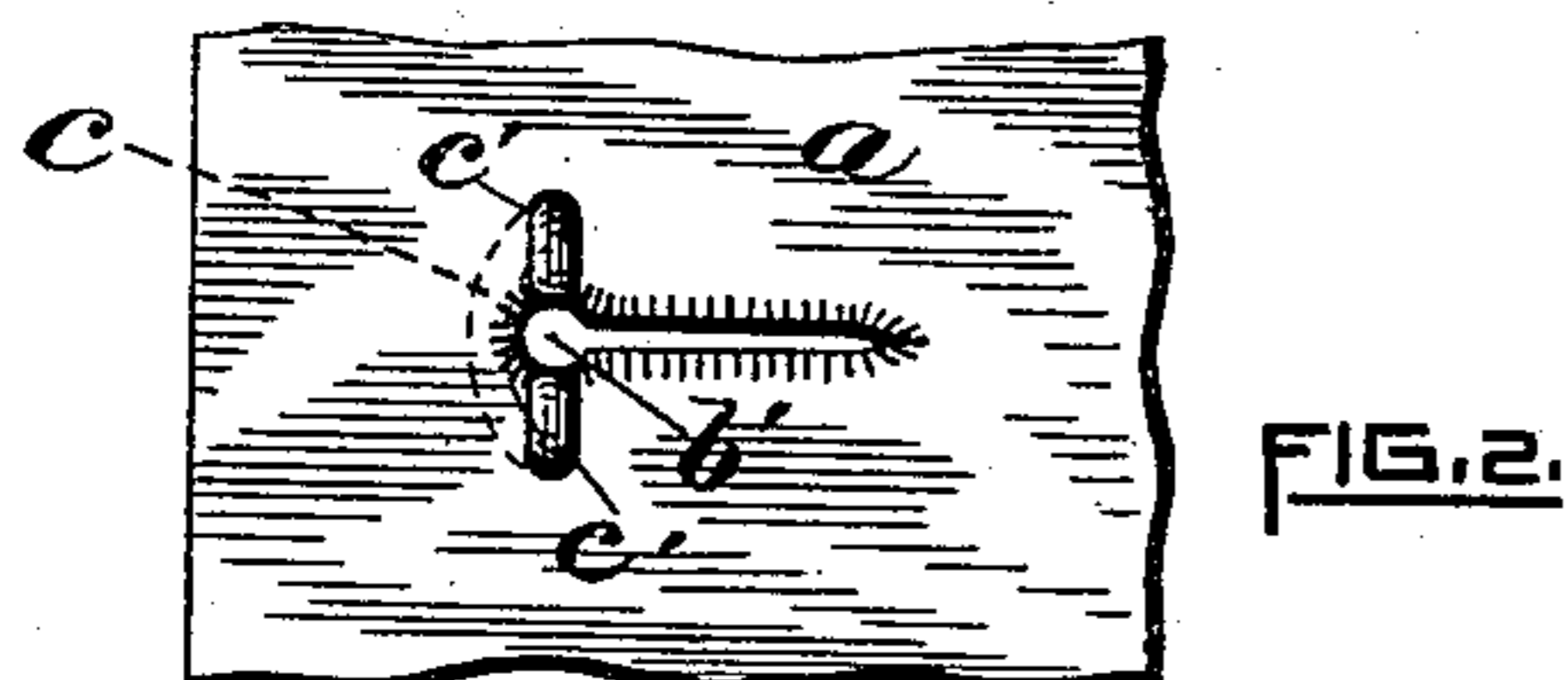
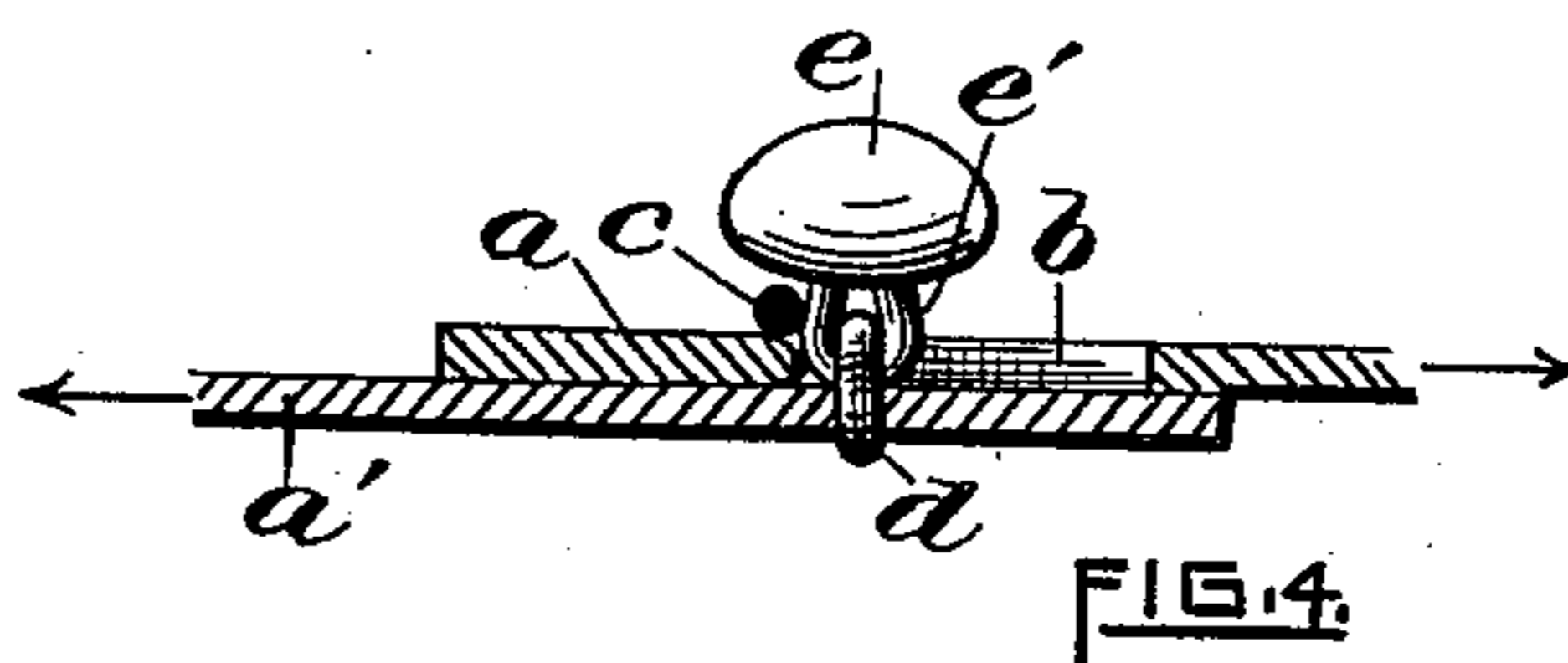
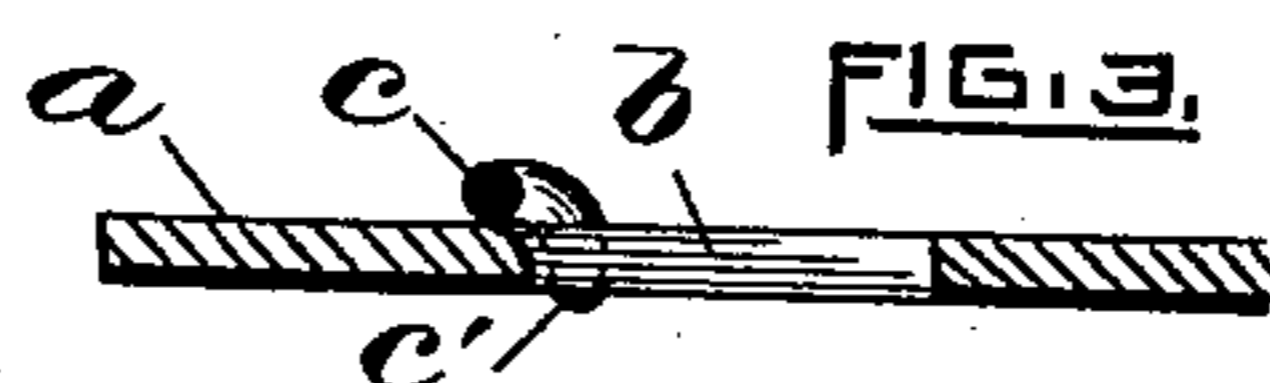
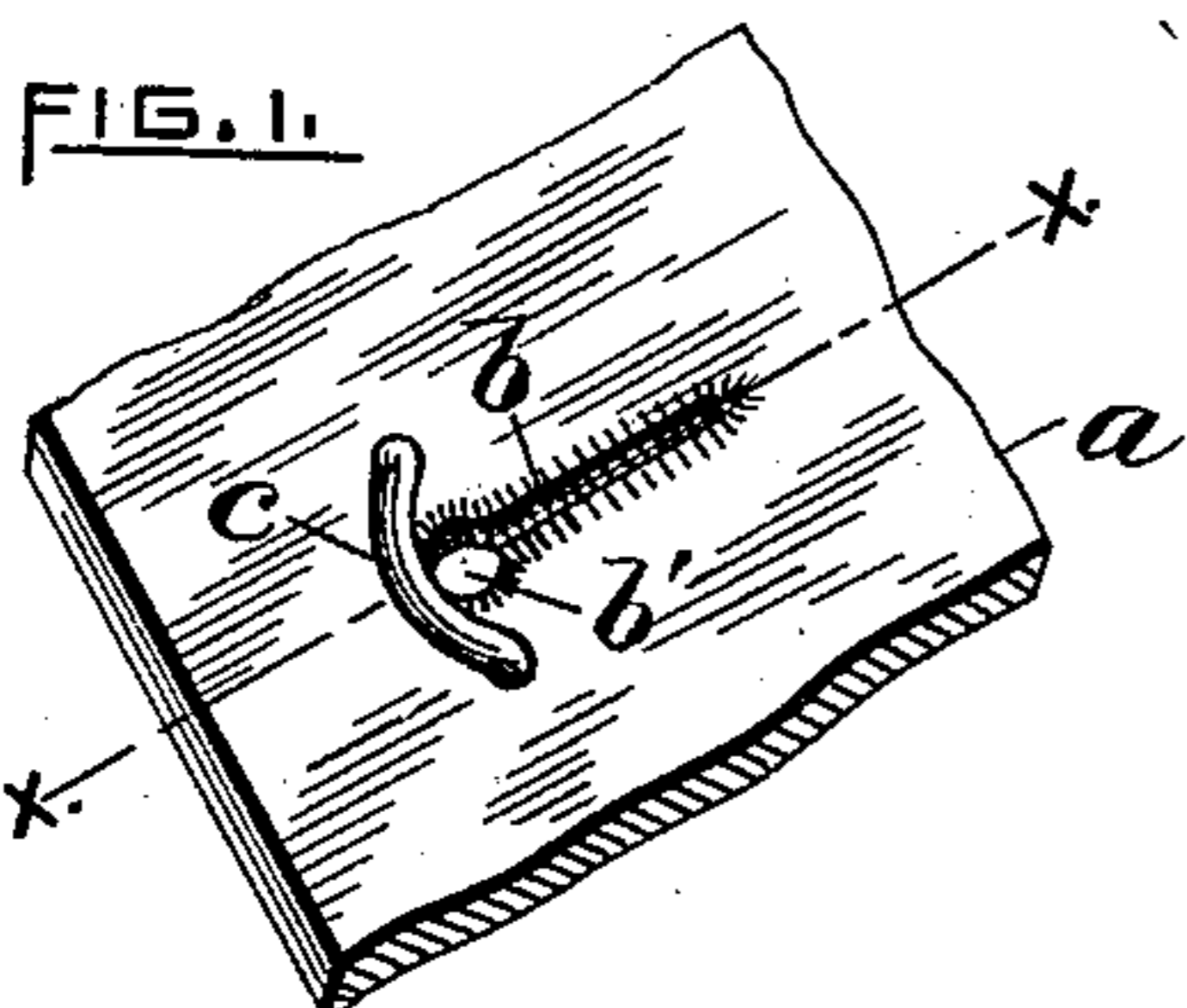


(No Model.)

G. W. PRENTICE.
BUTTONHOLE STAY.

No. 506,863.

Patented Oct. 17, 1893.



WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE W. PRENTICE, OF PROVIDENCE, RHODE ISLAND.

BUTTONHOLE-STAY.

SPECIFICATION forming part of Letters Patent No. 506,863, dated October 17, 1893.

Application filed March 9, 1891. Serial No. 384,290. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PRENTICE, 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 Protecting Buttonholes; 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.

In certain articles of wearing apparel, such for example as shoes, leggins, &c., it frequently happens that in use the leather or material immediately adjacent to the button-holes becomes seriously impaired or distorted, thereby enlarging the button-hole to such an extent as to render the holding capacity of the button of little if any practical value. Such impairment is as a rule due to the wear and tear incident to continued use, although sometimes a poor or inferior quality of material is employed which is ill adapted to the work imposed on it.

Attempts have heretofore been made to protect or reinforce the edges of button-holes by perforated pieces of thin metal inserted between the layers of fabric or secured to one of the outer surfaces thereof. Still another manner of guarding or strengthening button-holes is shown and described in United States Patent No. 215,541, granted to me May 20, 1879. In that patent the device consists of an upper and lower plate of metal secured together, with the leather or fabric between them.

The purpose of my present invention is to strengthen button-holes by an improved means, the same possessing a greater degree of flexibility than others heretofore made; to that end it consists essentially in inserting the prongs of a curved-headed metallic staple through the material or fabric at the end of and at substantially right angles with the button-hole slit, and clinching the prongs on the opposite side of the material.

In the appended drawings, Figure 1 is a

perspective view, showing a button-hole strengthened according to my invention. Fig. 2 is a similar view, showing the under or reverse side. Fig. 3 is a sectional view, taken on line *x x* of Fig. 1. Fig. 4 is a similar view, showing the improvement as in use, combined with a button. Fig. 5 is a perspective view of the reinforcing staple itself preparatory to being secured to the material to stay the button-hole; and Fig. 6 shows the appearance of an unstayed button-hole after considerable use.

In the drawings *a* indicates the leather or material forming the outer lap provided with a button-hole or slit *b*. As a rule button-holes are usually enlarged at the outer ends of the slots to form eyes *b'*, the better to receive the eye-shanks of buttons.

My improvement consists in staying the material *a* by securing a staple *c* thereto adjacent to the enlarged end of the button-hole. The head or crown portion of the staple is curved or otherwise bent in a plane at substantially right angles with that of the prongs *c'*, thus forming a lateral offset. This form of crown also renders it somewhat yielding or resilient, at least it possesses such property when made of drawn wire having a comparatively small diameter. The prongs *c'* of the staple or button-hole stay are adapted to puncture the material *a* and to be clinched thereunder in any well known manner. I preferably arrange and attach the staple so that the prongs penetrate the fabric in a direction transversely of the button-hole, as shown, the head or arch bearing upon or being slightly embedded into the upper surface of *a*, and extending partially around the end of the button-eye *b'* in such manner that the concave side of the arch lies contiguous to the outer end portion of the button-eye.

From the foregoing it will be seen that a button-shoe or other article of wearing apparel provided with buttons and having the button holes stayed with my improved staple is rendered stronger and stiffer at the point of greatest strain or pressure, *i. e.*, the enlarged end of the slot *b*. The metallic staple when attached and in use is somewhat yielding; it prevents the material adjacent there-

to from becoming unduly strained or torn, and the hole from being elongated and otherwise distorted. Fig. 4 represents a button *e* secured by a fastener *d* to the under-lapping piece *a'*, the eye-shank *e'* of the button being in contact with the crown of the staple.

My improved button-hole reinforcing stay or staple *c* I prefer to make of wire having a round or half-round form cross-sectionally, since staples having angular sides serve to abrade and disfigure the buttons, &c., to a much greater extent.

I am aware that metallic stays or protectors have hitherto been proposed for reinforcing or staying button-holes, and therefore I do not claim such invention broadly.

I claim as new and desire to secure by United States Letters Patent—

1. The hereinbefore described wire button-hole protector or stay, the same consisting of a segmental-shaped head or crown whose concave portion is adapted to lie contiguous to the eye or outer end of a button-hole, and two puncturing prongs extending downwardly from the ends of the crown.

2. An attachable wire button-hole stay having a segmental-shaped head or crown, the concave portion of which is adapted to partially encircle the end of the button-hole, substantially as described.

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

GEORGE W. PRENTICE.

Witnesses:

CHARLES HANNIGAN,
F. A. SMITH, Jr.