

No. 652,959.

H. C. LLU FRIO.  
BUTTON.

Patented July 3, 1900.

(Application filed Oct. 6, 1899.)

(No Model.)

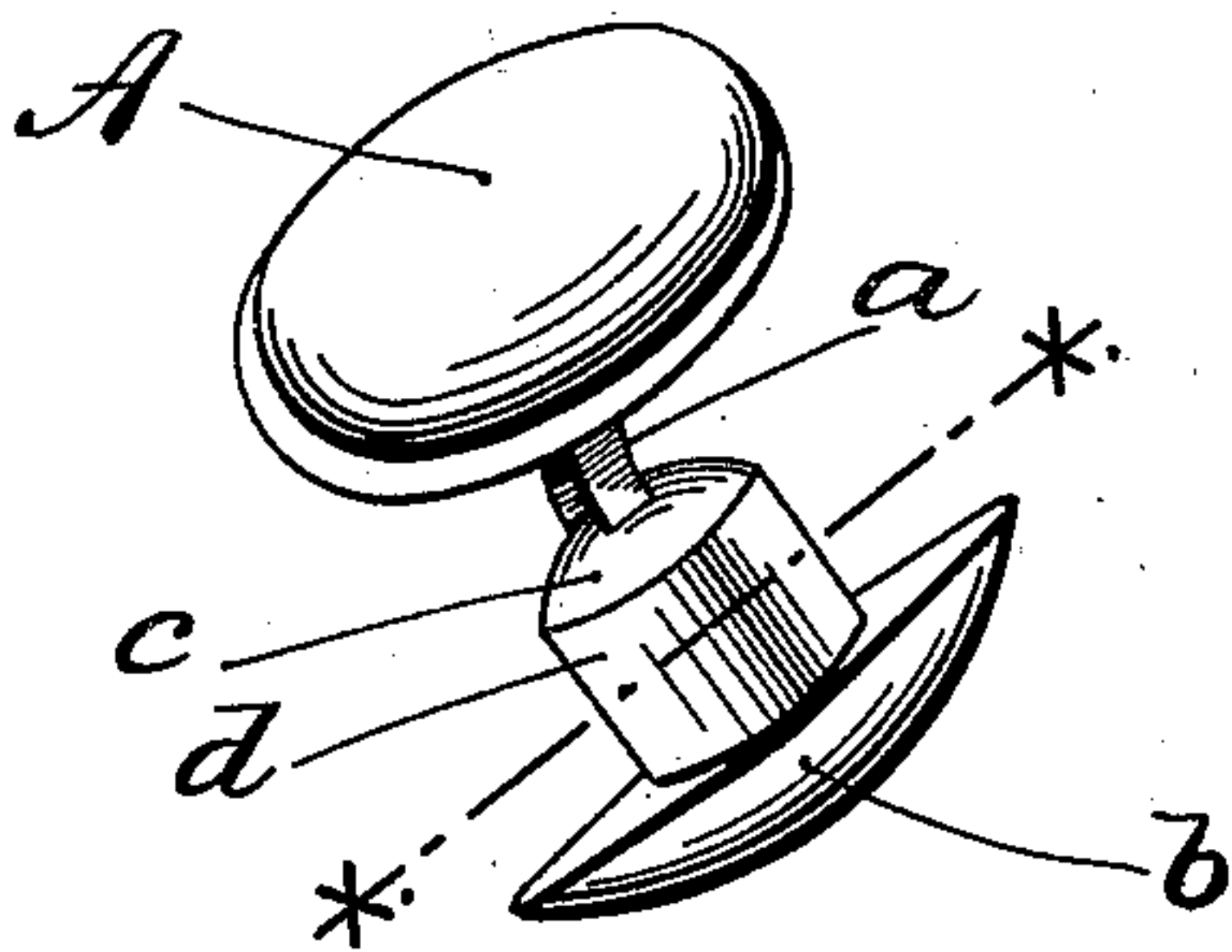


FIG. 1.

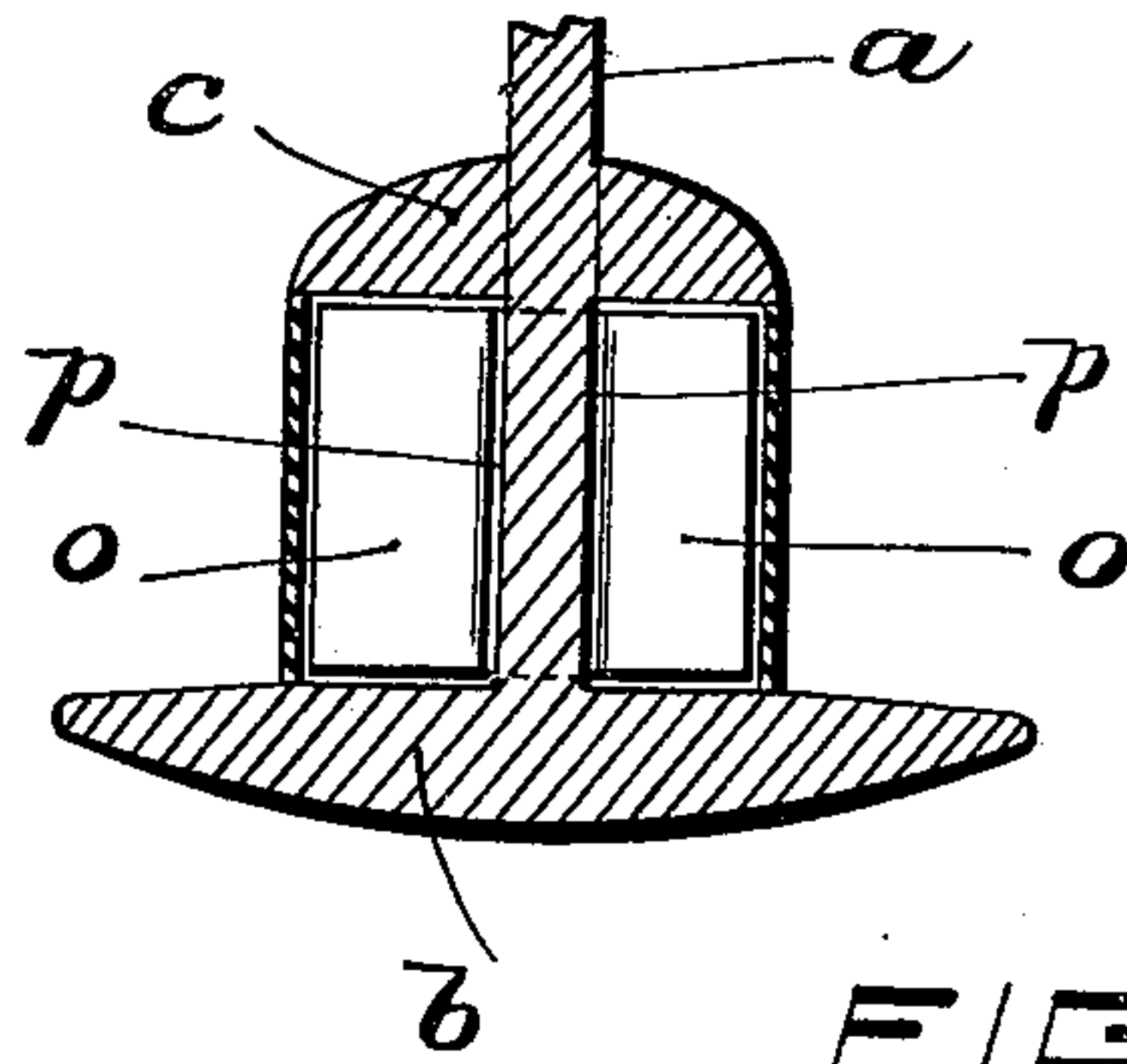


FIG. 2.

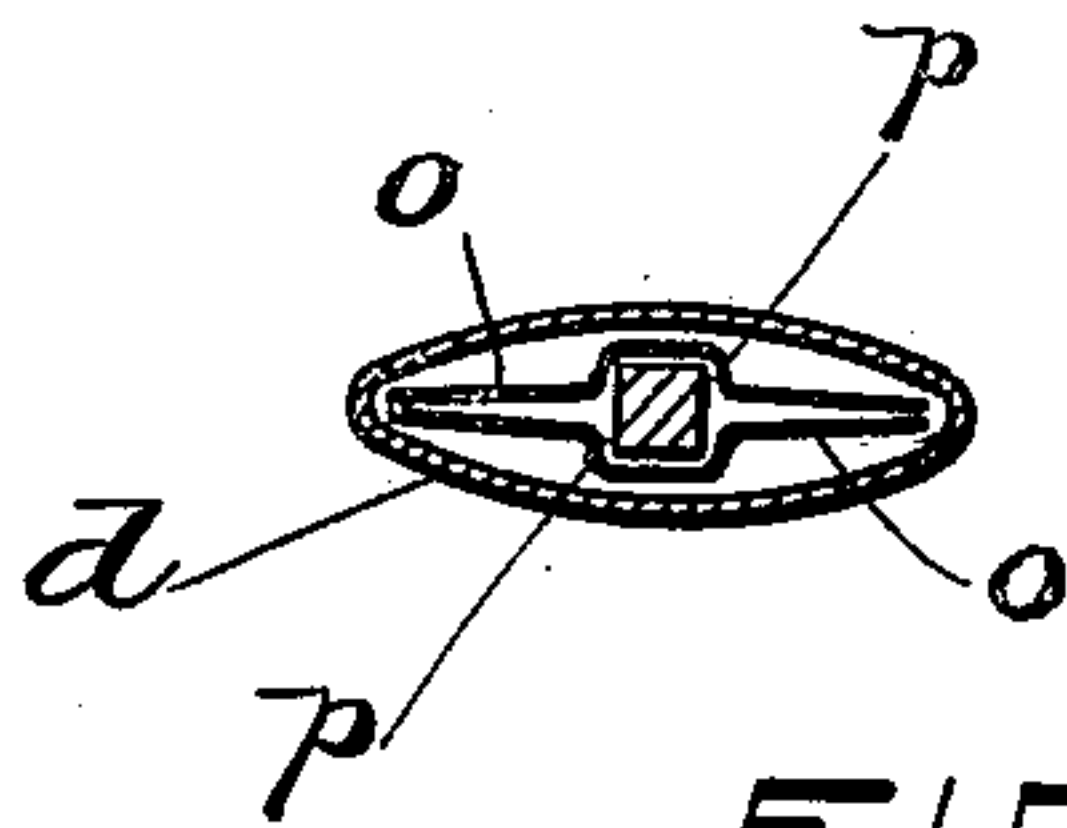
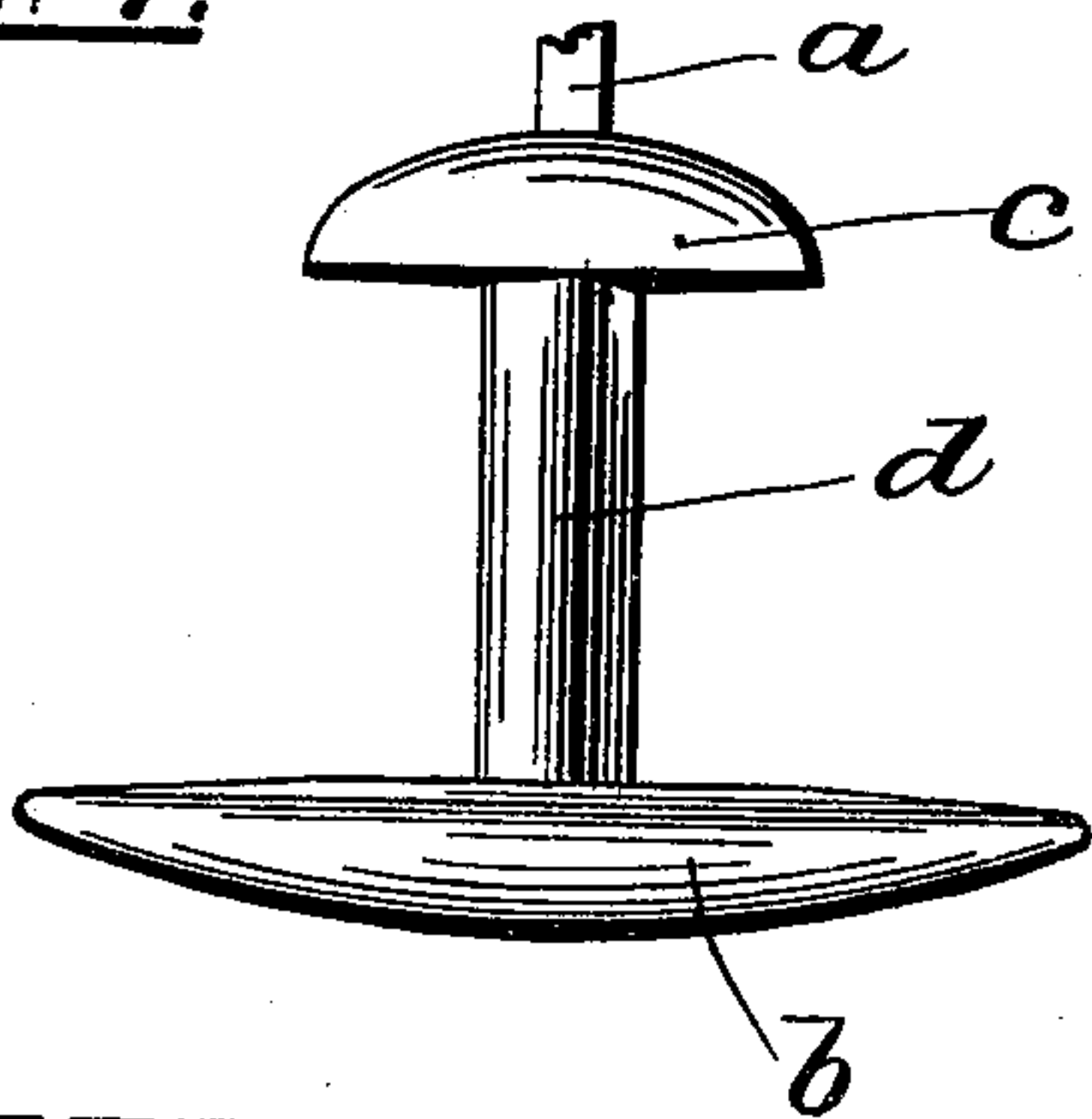


FIG. 3.

FIG. 4.



WITNESSES.

Charles T. Hannigan.  
Hebert A. Rice.

INVENTOR.

Henry C. Llufrío  
By Horatio E. Bellows.  
Att'y.

# UNITED STATES PATENT OFFICE.

HENRY C. LLU FRIO, OF PROVIDENCE, RHODE ISLAND.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 652,959, dated July 3, 1900.

Application filed October 6, 1899. Serial No. 732,775. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. LLU FRIO, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Buttons or Studs, of which the following is a specification, reference being had therein to the accompanying drawings.

Similar letters refer to similar parts throughout the several views.

My invention relates to the class of buttons adapted to insertion and removal from a garment without defacing or straining the adjacent fabric; and it consists in the novel combination and construction of its several parts.

Figure 1 is a perspective view of a cuff-button containing my invention ready for insertion. Fig. 2 is a central vertical section of the locking portion of my button; Fig. 3, a transverse sectional view of the same on line *xx* of Fig. 1, and Fig. 4 a side view of the same with the shank in engaged position.

In the drawings, *A* is the button-head, and *a* is a post or link which is at its lower extremity integral with the shoe *b*. The latter is shaped as a guide, being in longitudinal section the segment of a circle, except that its upper face slants downwardly toward its ends and is slightly beveled at each extremity to facilitate removal from the fabric. Above the shoe, parallel thereto and permanently fixed to the post, is a cross-bar *c*, which serves as a guide to direct the edges of the button-hole downwardly over the tubular shank and as a relief to the tubular shank intermediate itself and the shoe *b*. Intermediate the cross-bar *c* and the shoe *b* is a tubular shank *d*, capable of rotary movement upon the shoe and around the post *a*. A flat spring or springs *o o*, having shouldered portions at the center forming positive stops and serving to center the spring or springs, rest within the interior space of the tube *d* on either side of the post and bear against the faces of the post. The spring has sufficient elasticity to allow rotary movement of the shank around the post, while exerting sufficient pressure to hold the shank in any position assumed by it when the post-faces and spring-surfaces are parallel.

It is evident from the above description

that when the post is rectangular each quarter-revolution of the shank brings it into coincidence with the plane of the shoe *b* or at right angles thereto.

To insert or detach my button, the shank *d* is brought into line with the shoe *b*, as in Figs. 1 and 2. After insertion the head *A* is given a fractional turn in either direction, which places the shoe at an angle with the shank and the buttonhole-slit.

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

1. As a new article of manufacture, a button having a head, a post integral with or fixedly attached to the head, a shoe or base portion integral with or fixedly attached to the post, a cross-bar forming part of or fixedly secured to the post between the head and shoe, a tubular shank surrounding said post, and a spring or springs within said shank adapted to engage with said post to hold the shank in any of the positions it is adapted to assume.

2. As a new article of manufacture, a button having a head, a square post integral with or fixedly secured to the head, a shoe or base portion integral with or fixedly attached to the post, a cross-bar forming part of or fixedly secured to the post between the head and shoe, a tubular shank encircling said post, and a flat spring or springs within said shank and having central longitudinal shouldered portions adapted to engage with said post and hold the shank in any of the positions it is adapted to assume.

3. As a new article of manufacture, a button having a head, a square post integral with or fixedly attached to the head, a shoe or base portion integral with or fixedly attached to the post said shoe being downwardly inclined toward its ends, a tubular shank encircling said post, and a flat spring or springs within said shank and having central longitudinal shouldered portions adapted to engage with said post and hold the shank in any of the positions it is adapted to assume.

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

HENRY C. LLU FRIO.

Witnesses:

ROBERT W. THOMPSON,  
HORATIO E. BELLOWS.