

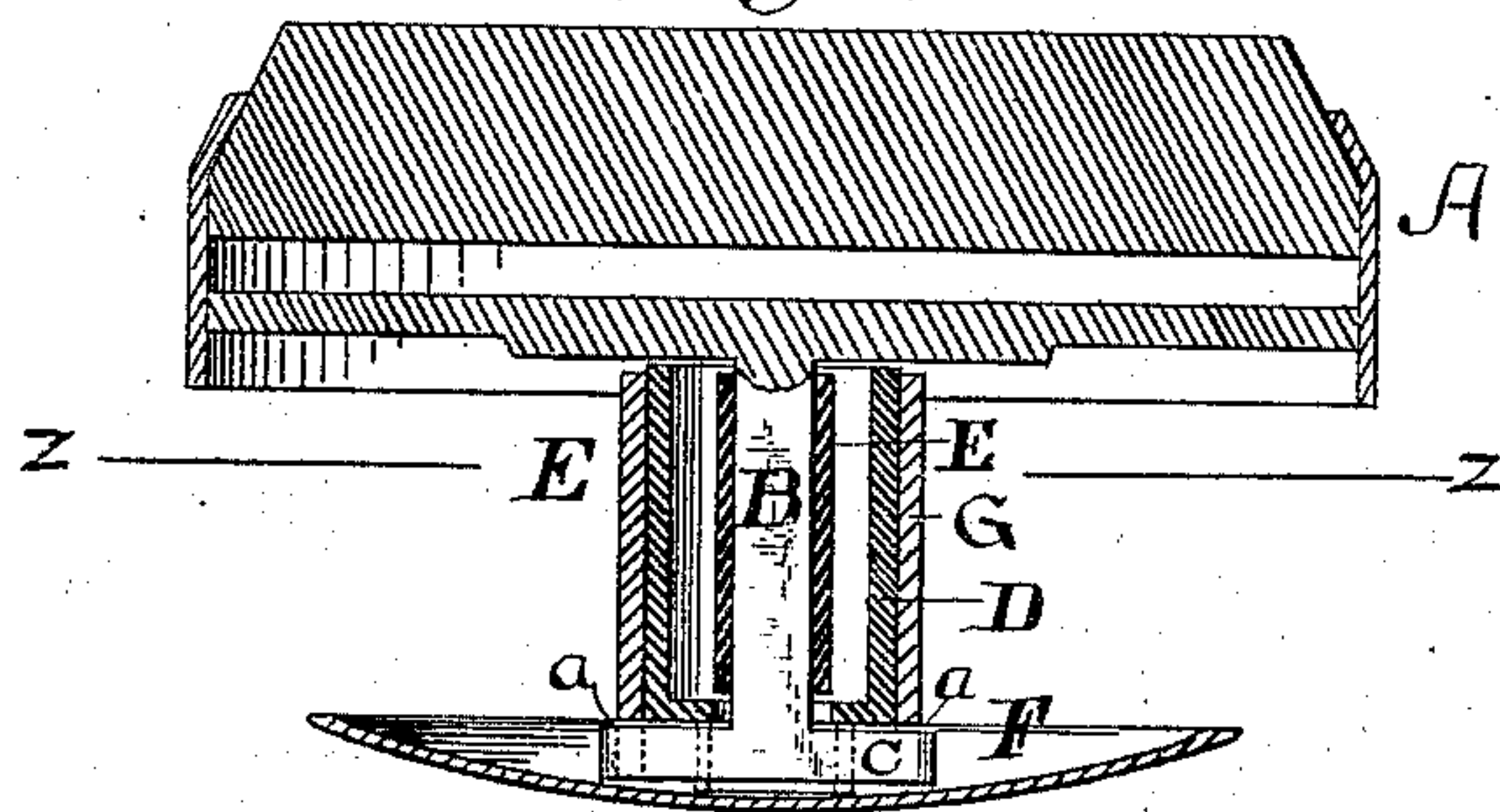
(Model.)

J. E. CHACE.  
Button and Stud.

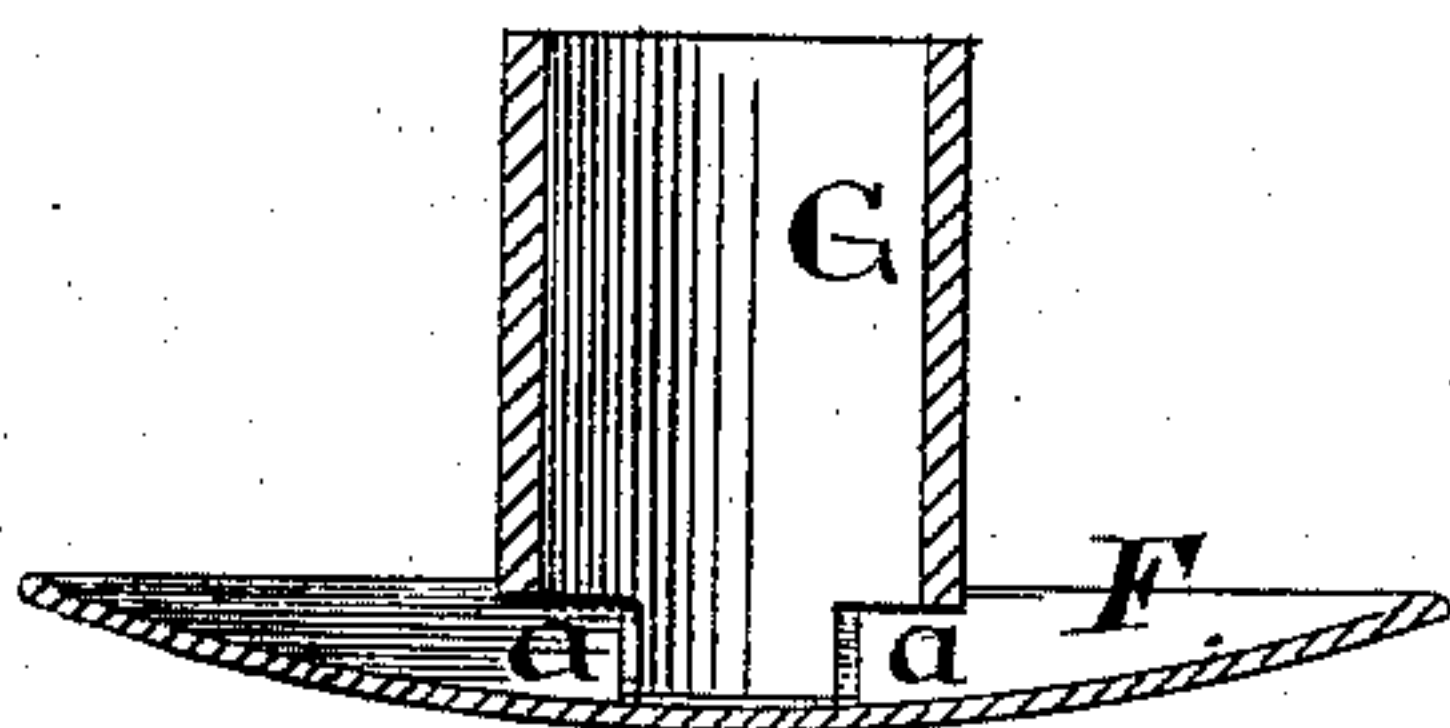
**No. 238,088.**

**Patented Feb. 22, 1881.**

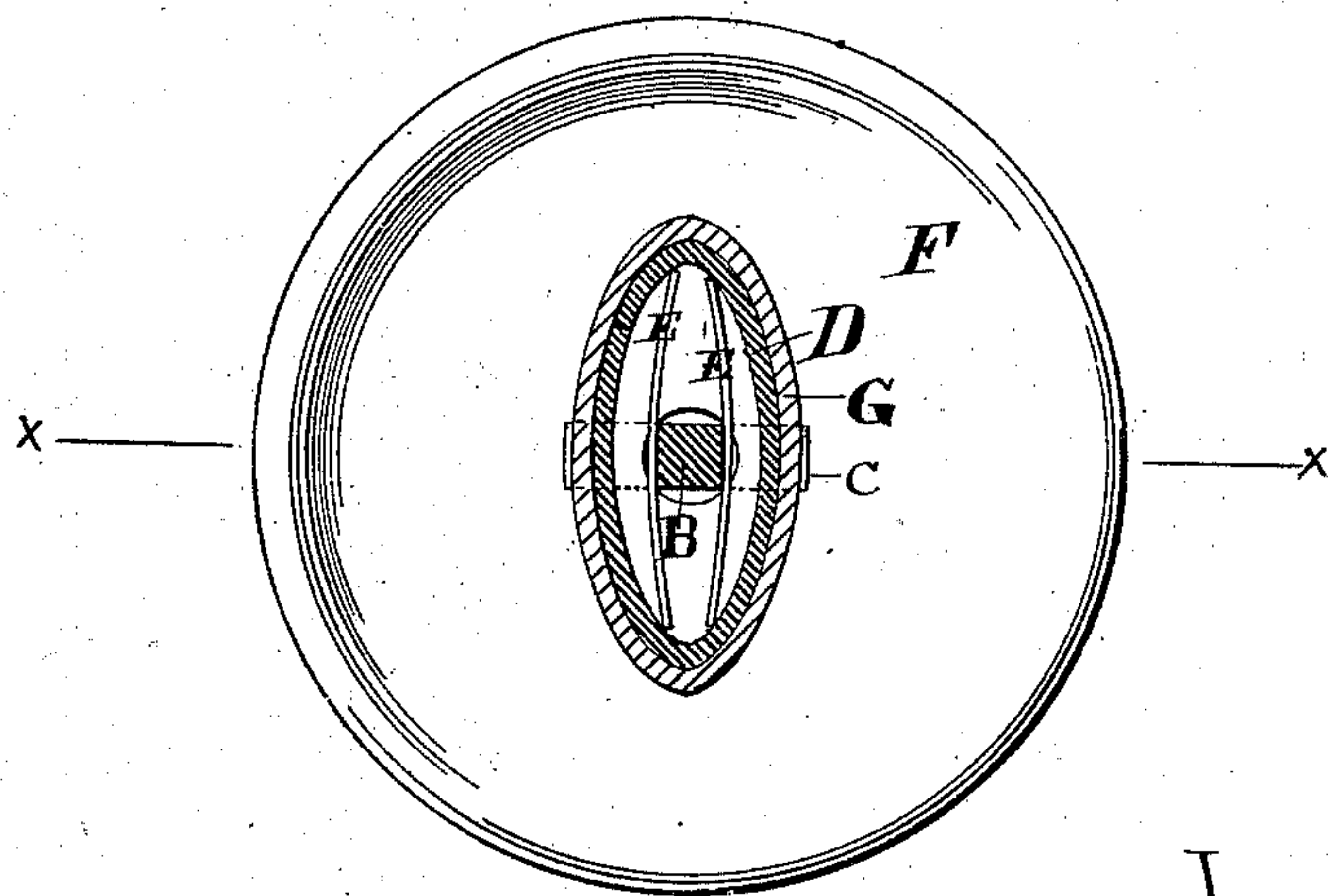
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Attest.

S. P. Campbell

Inventor.

James E. Chace  
By his atty  
R. D. Smith

# UNITED STATES PATENT OFFICE.

JAMES E. CHACE, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO METCALF,  
WARREN & CO., OF SAME PLACE.

## BUTTON AND STUD.

SPECIFICATION forming part of Letters Patent No. 238,088, dated February 22, 1881.

Application filed September 20, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, JAMES E. CHACE, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Buttons and Studs; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a vertical section on the line  $xx$ , Fig. 3. Fig. 2 is a vertical-section in the same plane of the button-back and its tubular post. Fig. 3 is a transverse section on the line  $zz$ , Fig. 1.

My invention relates to separable sleeve-buttons, collar-buttons, and studs; and it consists of making the button-front with a square-faced shank, which is engaged within a revolving tubular post by flat or bow springs inclosed therein, and which carries a cross-piece, by means of which it is locked within a slot in the tubular post of the button-back when turned a quarter-revolution.

The button-front A, has permanently affixed to it a shank, B, which has four square plane faces. At the outer end of the shank B a cross-bar, C, is fastened. The shank B extends through the elliptical tubular post D, which is capable of rotation on said shank. Within the post D, and held by it at their ends, are two flat or bow springs, E, which bear against two opposite sides of the shank B and serve to retain the revolving hollow post D in position at every quarter-revolution.

The hollow post serves to inclose and protect the springs E, which may, therefore, be made of steel or other suitable material, and prevent contact between them and the edges of the button-hole. The external surface of

said post, therefore, always presents to the button-hole the same outline, and the springs E may be independent of each other, so that the button will remain serviceable if one of them should become broken or otherwise disabled.

The back F of the button has a fixed elliptical hollow post, G, to receive the post D of the button-front. The post G has two slots,  $aa$ , into which the ends of the cross-bar C enter and engage, thus locking together the front and back of the button whenever said cross-bar is revolved with the button-front to a line at right angles with the major axis of said tubular posts.

I am aware that this arrangement of the shank, springs, and cross-bar is not new; and I do not claim the same, broadly; but I do claim that I am the first to combine this device with a slotted button-back to form a separable button.

I therefore claim as a novel and useful invention, and desire to secure by Letters Patent—

In a separable button, a button-front, A, having rigidly attached to it a rectangular-faced shank, B, provided at its outer end with a cross-bar, C, and an elliptical tubular post, D, mounted upon said shank and capable of revolving thereon, and provided with flat springs E, inclosed within and protected by said post, combined with a shoe, F, having a tubular elliptical post, G, provided with slots  $aa$  to engage with said cross-bar, as set forth.

JAMES E. CHACE.

Witnesses:

WM. B. W. HALLETT,  
WARREN R. PERCE.