

(No Model.)

J. RODRIGUEZ.  
SEPARABLE BUTTON.

No. 520,122.

Patented May 22, 1894.

Fig. 1.

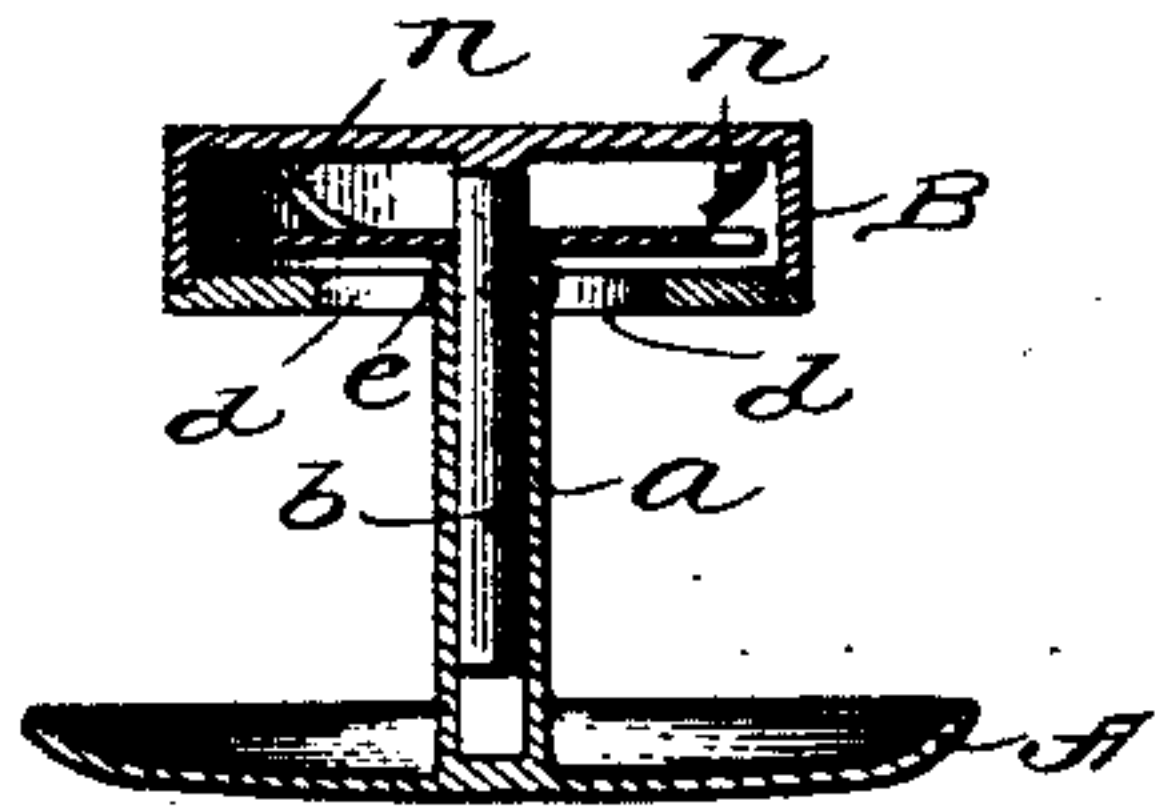


Fig. 2.

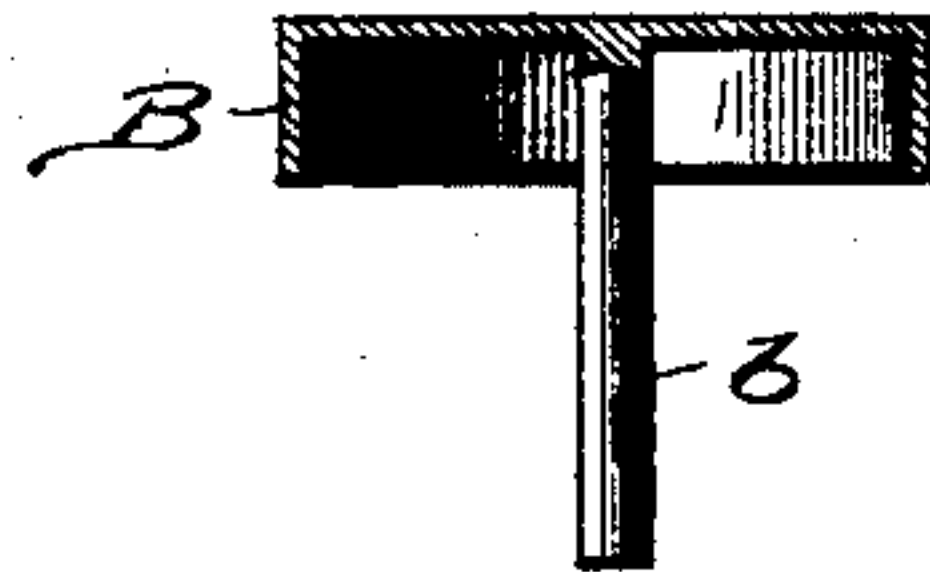


Fig. 3.

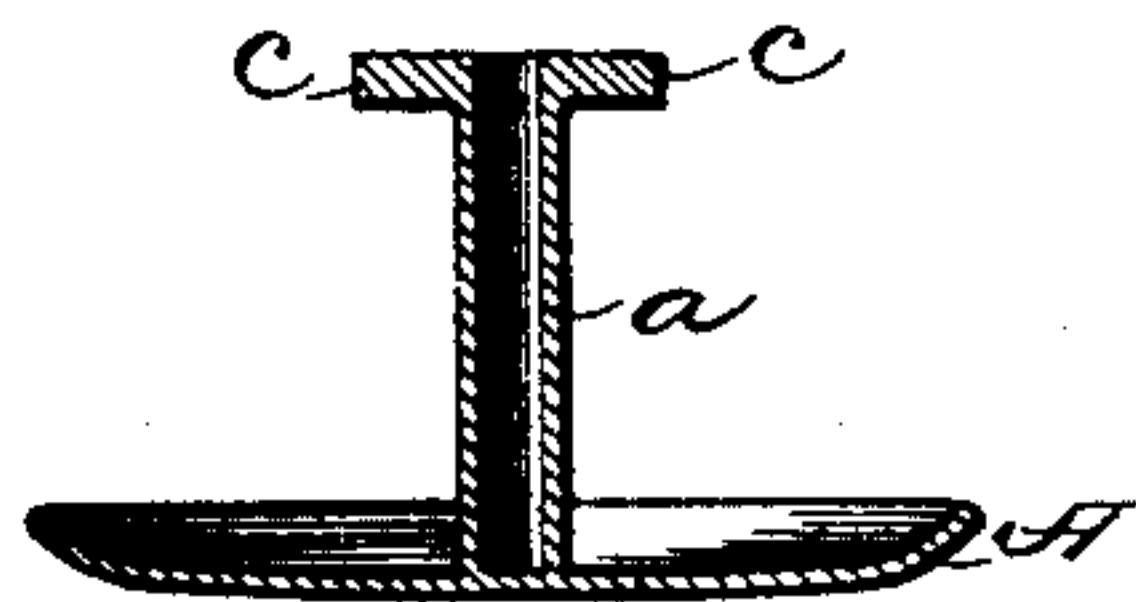


Fig. 4.

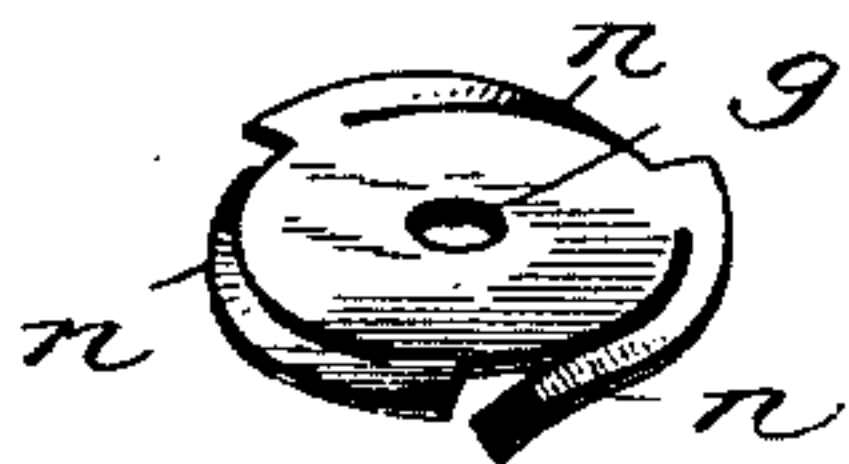


Fig. 5.

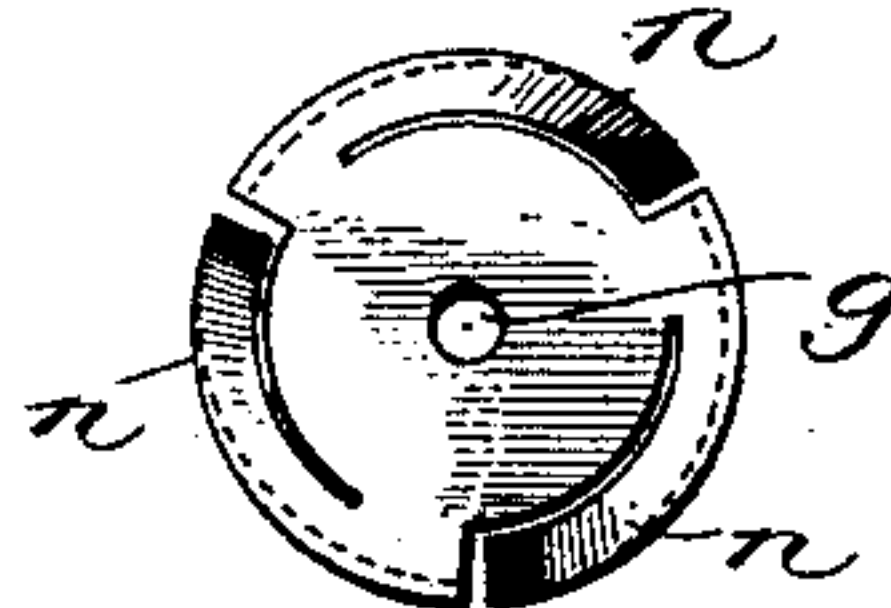


Fig. 6.

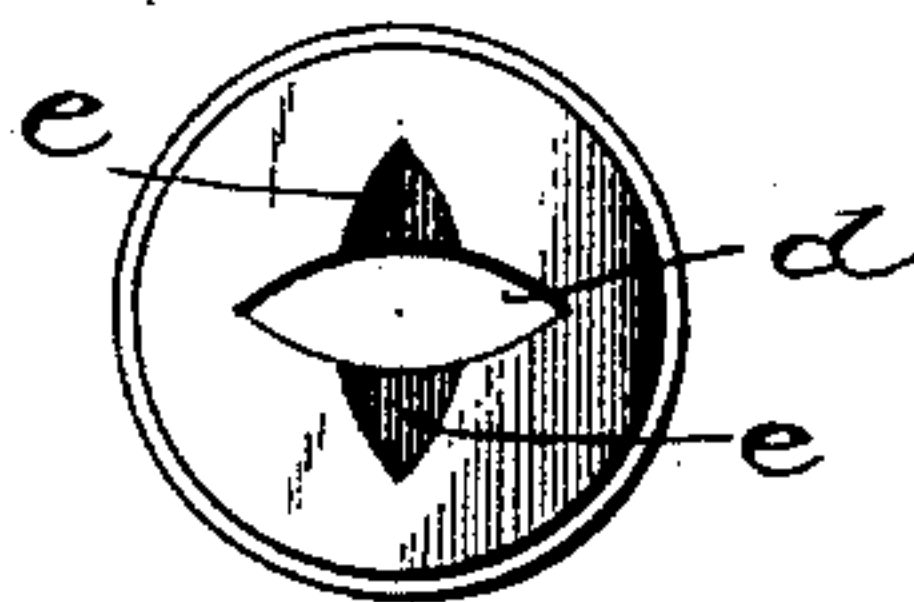


Fig. 7.

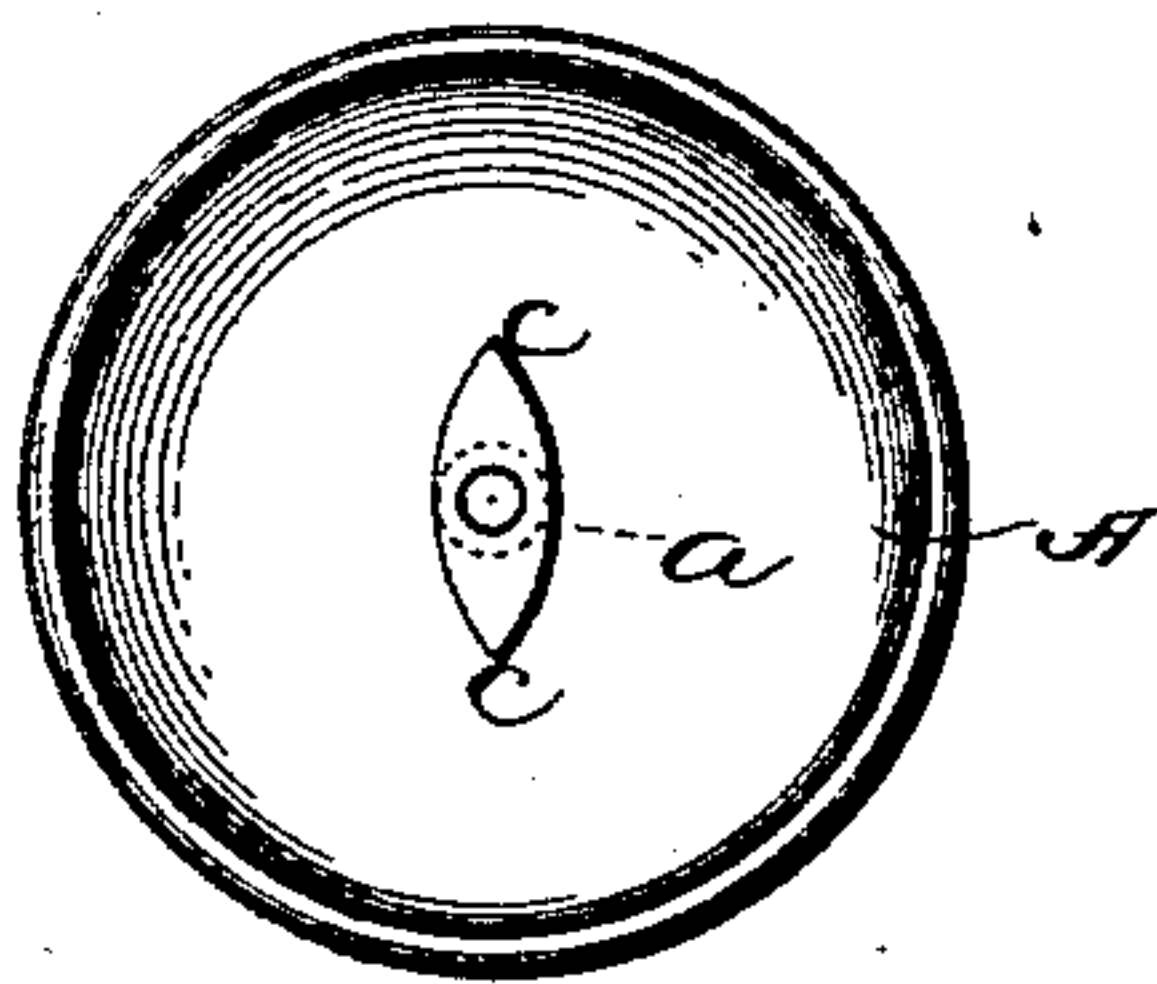
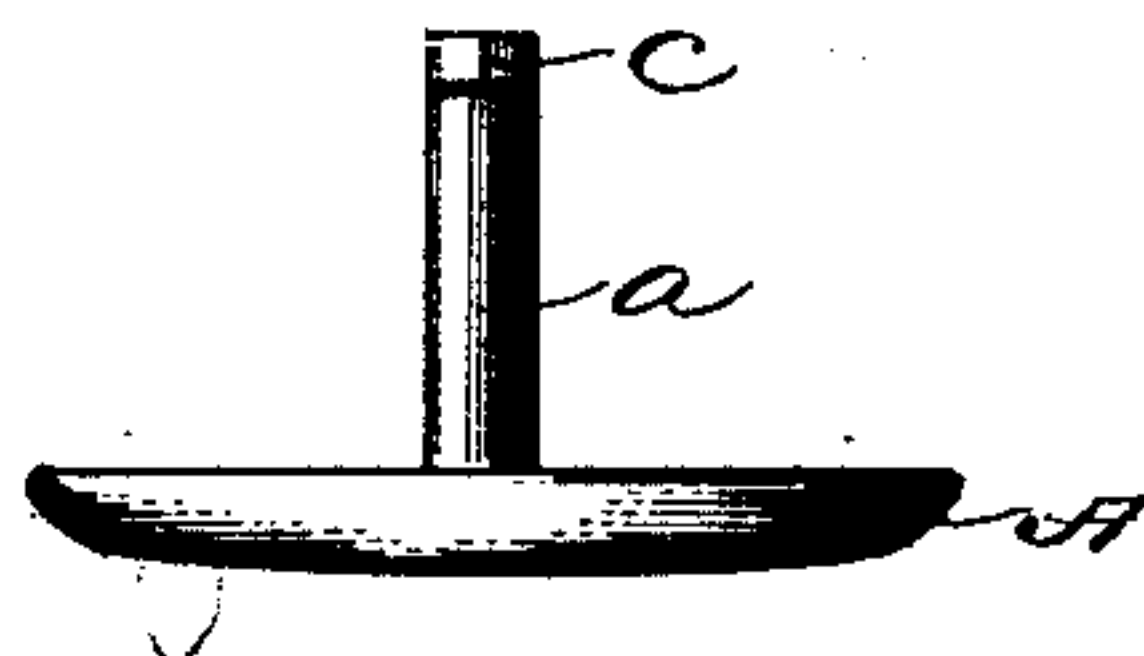


Fig. 8.



witnesses:

Harry S. Potter  
Chas. F. Miller

Inventor

Joseph Rodriguez,  
By  
Hume & Goldborough  
Attorneys

# UNITED STATES PATENT OFFICE.

JOSEPH RODRIGUEZ, OF NEW YORK, N. Y.

## SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 520,122, dated May 22, 1894.

Application filed March 7, 1894. Serial No. 502,611. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH RODRIGUEZ, a subject of the King of Spain, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Separable Buttons; 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.

My invention relates to certain new and useful improvements in separable buttons, and is designed to furnish a construction thereof combining great simplicity, with efficiency of operation, and economy in point of manufacture.

In the accompanying drawings, Figure 1 represents a view of my improved button mainly in vertical section. Fig. 2 represents a view of the button head and its attached post partly in section. Fig. 3 represents a vertical section of the base of the button and its attached hollow shank. Fig. 4 represents in perspective a spring disk constituting one of the elements of the separable button. Fig. 5 represents a plan view of the same. Fig. 6 represents an interior view of the bottom plate of the button head. Fig. 7 represents a plan view of the base of the button and its hollow shank. Fig. 8 represents a side elevation thereof.

Referring to the drawings, A indicates the base of the button, and B the separable head which may have any suitable contour, as, for instance, the cylindrical shape shown. The shank *a* is made hollow or tubular so as to fit over a post *b* projecting from within the head B, and is provided at its free end with the lateral wings or projections *c*.

The button head consists of a hollow casing, having the post *b* just referred to, which post projects through an opening *d* of contour similar to the end of the shank *a* and its wings *c*. At right angles to the opening *d* recesses *e* corresponding to the wings *c* are made in the interior of the plate *f* of the button head, so that when the wings enter the head through the opening *d*, the head may be turned to bring them into the said recesses. To releasably lock the wings in this position of engagement with the recesses, I make use

of a spring disk, having a central aperture *g* through which the post *b* passes without friction. This disk is provided with a number of slits extending inwardly from its periphery and connecting with co-operating slits concentric with the periphery. The outlying portions *n* of the disk thus formed are thereupon bent downward so that their free ends will rest upon the casing and serve as spring supports for the main body of the disk, which is thereby held against the end of the shank *a* and retains the wings *c* within the recesses *e* until disengaged. A peculiarity and advantage of this construction of disk, in the relationship shown, is that it can be of substantially the same diameter as the interior of the button head, so as to develop its maximum amount of resilience in the contracted space within which it acts. The spring supports *n* are free to extend and contract circumferentially with respect to the main body of the disk, thereby exerting their full effect without requiring an increased diameter for the head and without making it ungainly. In case the inner surface of the head of the button upon which the spring supports *n* rest is slightly conical, as may sometimes happen, I contemplate cutting off a corresponding small portion from the outer edges of the disk, as indicated by the dotted lines in Fig. 5, so that the downward movement of the disk may be unimpeded in operating the button.

The mode of operation will be apparent from the illustration and description given. Thus, in using the button, the shank *a* is first put through the button hole, and the post *b* is thereupon inserted within the shank. The head is then turned until the wings *c* register with the opening *d* whereupon they enter the head and as the head is turned farther they enter the locking recesses and are retained therein by the pressure of the disk until released by a reversal of the operation.

Having thus described my invention, what I claim is—

A separable button, consisting of a base having a hollow shank provided at its end with side wings, in combination with a hollow head having an opening for the admission of the shank end and locking recesses transverse



to said opening, a post projecting from the head and adapted to enter the shank, and a disk fitting over the post and having at its periphery a series of springs support substantially concentric therewith so as to expand and contract parallel to the side wall of the head; substantially as described.

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

JOSEPH RODRIGUEZ.

Witnesses:

H. A. WOODRUFF,  
I. WONBEY.