

W. G. SMITH.  
Separable-Buttons.

No. 219,369.

Patented Sept. 9, 1879.

Fig. 1

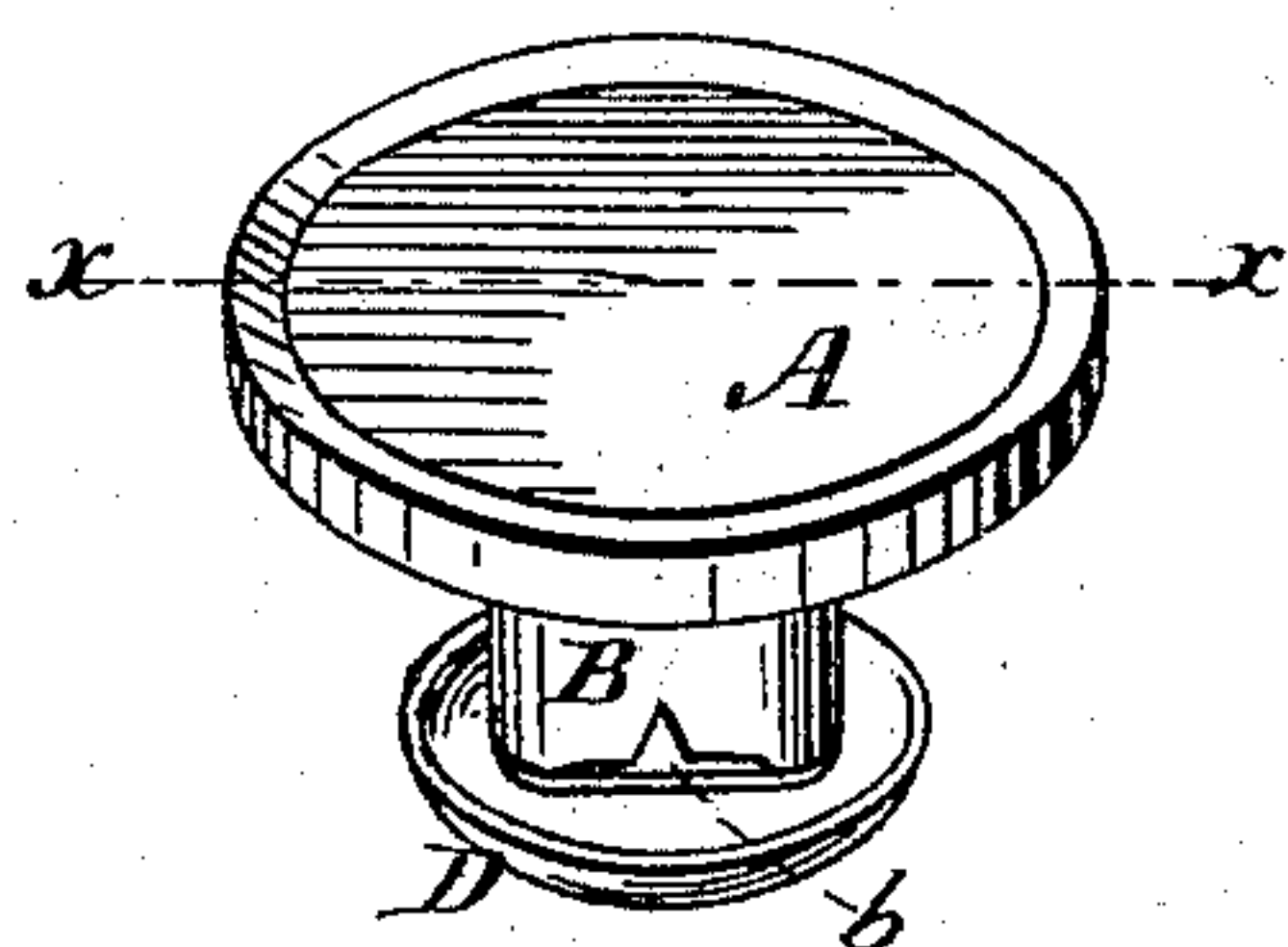


Fig. 2.

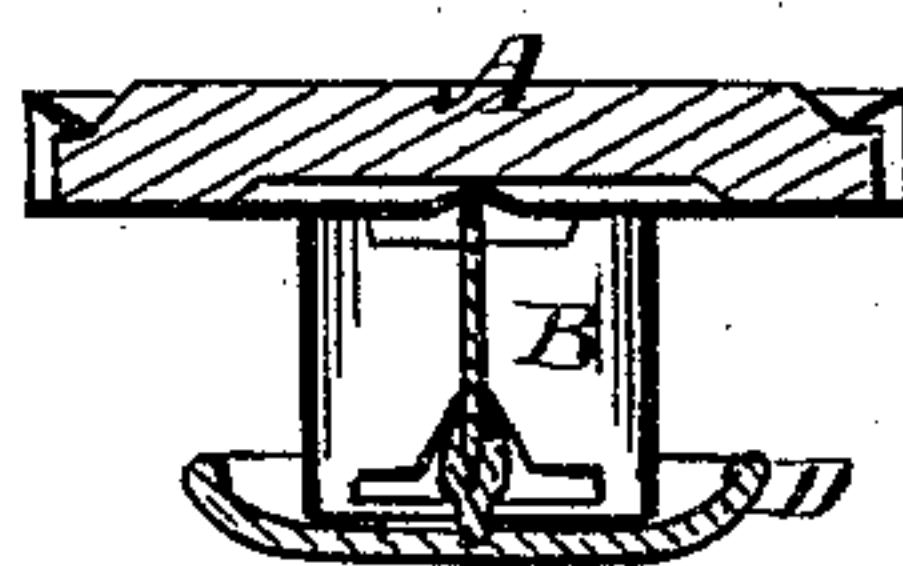
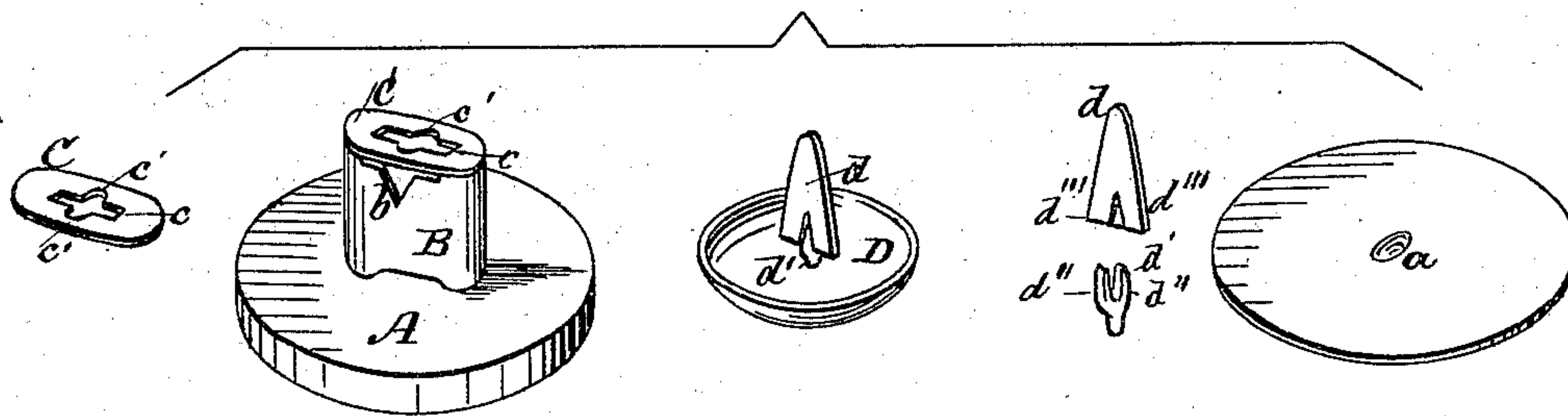


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN SEPARABLE BUTTONS.

Specification forming part of Letters Patent No. **219,369**, dated September 9, 1879; application filed August 4, 1879.

*To all whom it may concern:*

Be it known that I, WARREN G. SMITH, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Separable Buttons, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to that class of separable buttons and studs made of two principal parts that can be adjusted and locked together.

The accompanying drawings illustrate my improved device.

Figure 1 is a perspective view of my button closed. Fig. 2 is a sectional view on the line *x x*. Fig. 3 is a detailed view of the several parts disconnected.

Similar letters of reference indicate like parts.

The front piece or disk, A, forming the main portion of the button, can be made of any ornamental shape or design, or can be mounted with a stone or setting.

The post B is hollow, and is of an oval oblong shape. At the upper part of either of its longer sides is a triangular slot, *b*. The post B is soldered to the inner lining of the front button, A, and at its upper end is covered with a flat cap, C, pierced with an elongated quadrangular slot, *c*, having central projections or notches *c' c'*.

In order that the sides of the hollow post may give and spring while the locking projections of the blade *d* are passing within to engage within the slots *b*, the connections with the lining of the button A and the cap C are made only at the short curves of the post, the intermediate flat sides being left free and disconnected, thus forming an opening both at the upper and lower end of the post.

The shoe D is supplied with a post-blade, *d*, preferably pointed, and firmly held in a perpendicular position nearly up to the inner side of the shoe D by means of a central forked pin, *d'*, which fits into a groove in the blade *d*. The pin slightly projects beyond the sides of the post-blade, forming the small

shoulders *d'' d''*. In the center of the lining of the disk A is a small socket or thimble, *a*, forming a receptacle for the point of the blade *d*, serving to keep the several parts steady when adjusted.

Operation: The oval post B is passed through the button-hole of the garment, and then the blade *d* is inserted within the slot *c* of the cap C. It cannot be placed inside excepting when the extensions of the forked pin *d'* are brought within the projecting notches *c' c'* of the slot *c*. The shoe D is then turned half round until the shoulders *d'''* of the blade *d* reach and engage within the triangular slots *b*, thus forming a complete lock. At the same time the point of the blade *d* drops into the socket *a*, and all parts are kept steadily in position. A reverse half-turn will unlock the several parts, and the shoe D is then withdrawn from the hollow post.

The main objections of separable buttons hitherto have been the risk of accidental disconnection and the complicated devices provided for locking and unlocking.

My device overcomes these difficulties, as the engaging-shoulders of the blade D fall into the triangular notches in the hollow post by a simple half-turn of the shoe, and the button is readily separated by the same motion reversed, by bringing the shoulders of the forked pin within the lateral slots *c' c'* in the cap C.

I am aware that separable buttons have been made heretofore with a locking device inserted and engaging within a hollow post, and I do not broadly claim such locking device; but

Having now fully described my invention, what I claim is—

1. In a separable button, the hollow post B, provided with triangular side slots, *b b*, and a cap, C, pierced with a slot, *c*, and lateral extending notches *c' c'*, substantially as described.

2. In a separable button, a shoe, D, having a post-blade, *d*, kept in position at right angles with the plane of the shoe by means of the forked pin *d'*, and having shoulders *d'''*, substantially as described.

3. A separable button consisting of the main front A, having a hollow oval post, B, supplied with triangular locking-notches *b b*, and cap C, pierced with main slot *c* and laterally-extending slots *c' c'*, in combination with the shoe D, carrying a blade-post, *d*, having shoulders *d'''*, retained in position by means of the forked pin *d'*, having shoulders *d''*, the

whole adapted to interlock and form a complete button when adjusted for use, substantially as described.

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