

C. L. WATSON.  
Button and Stud Fastening.

No. 217,966.

Patented July 29, 1879.

Fig. 1

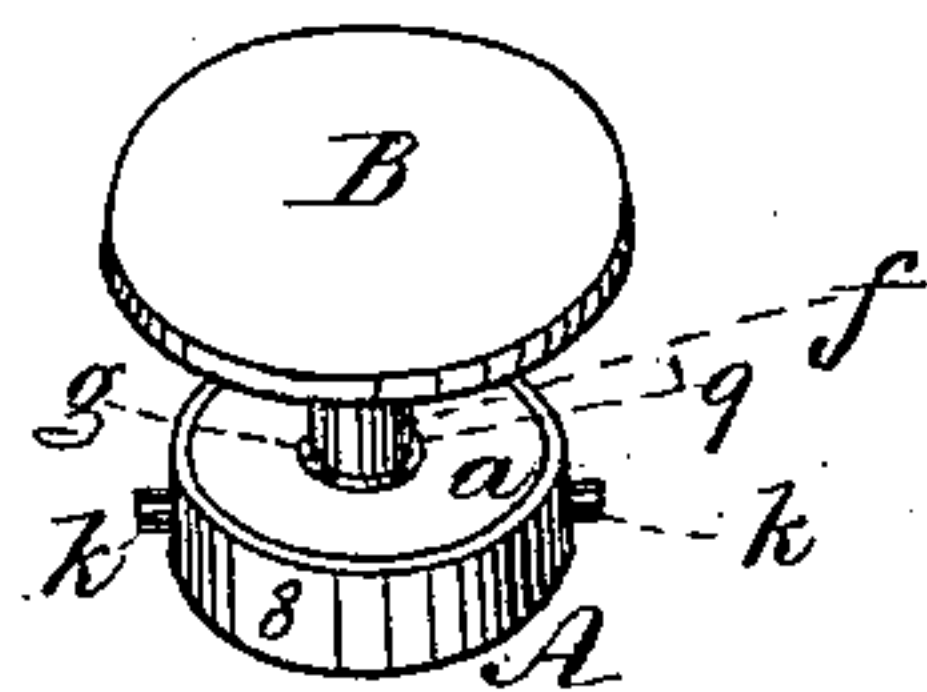


Fig. 2

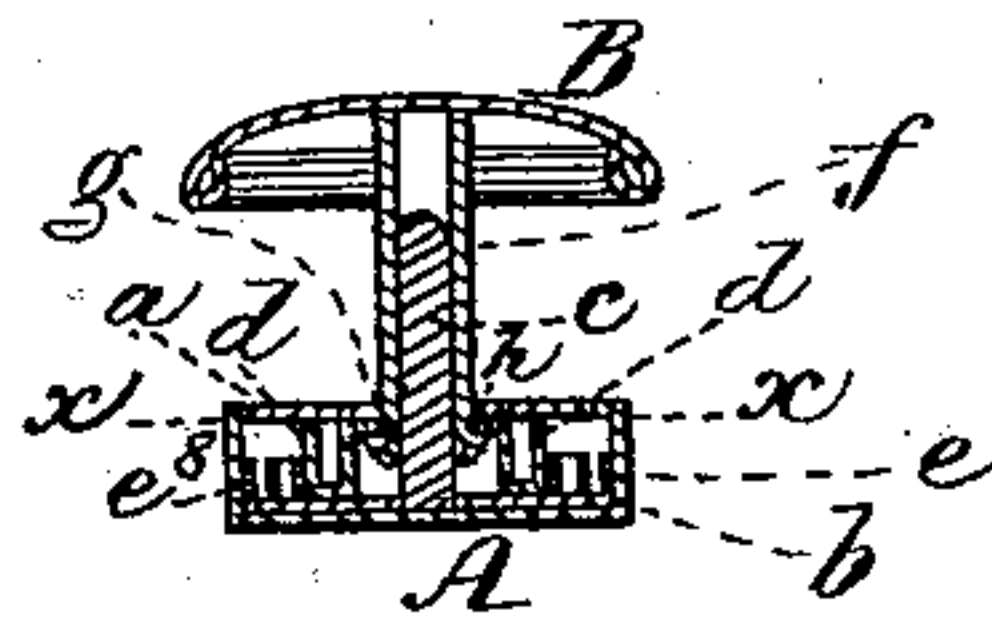


Fig. 3

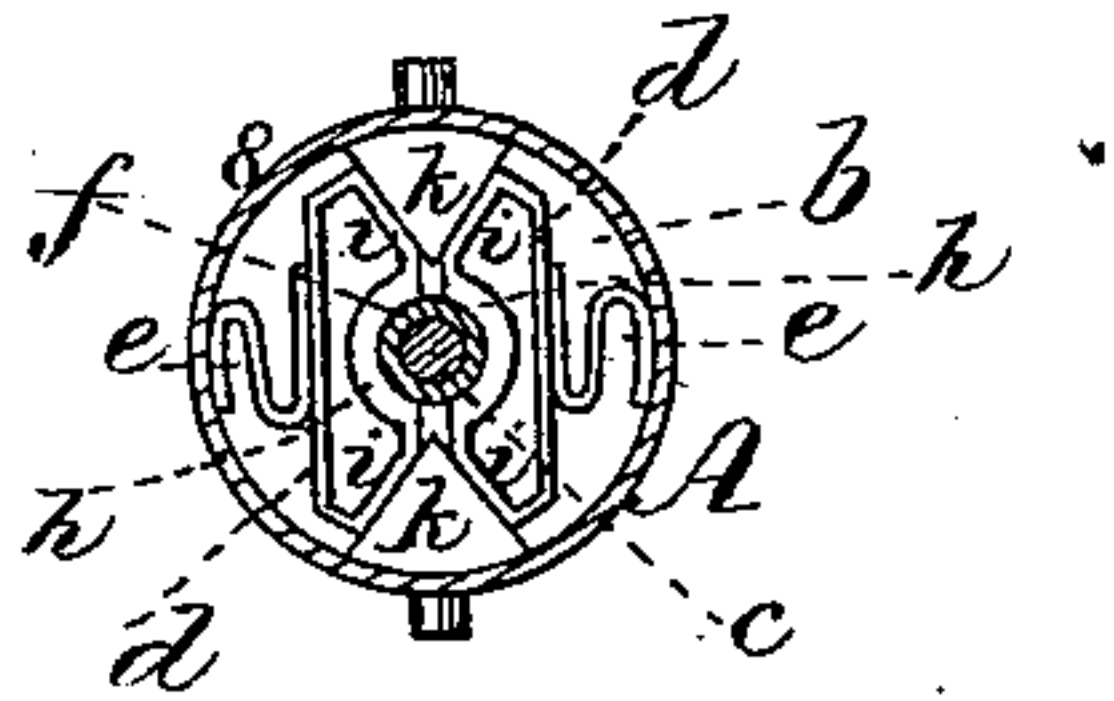


Fig. 4

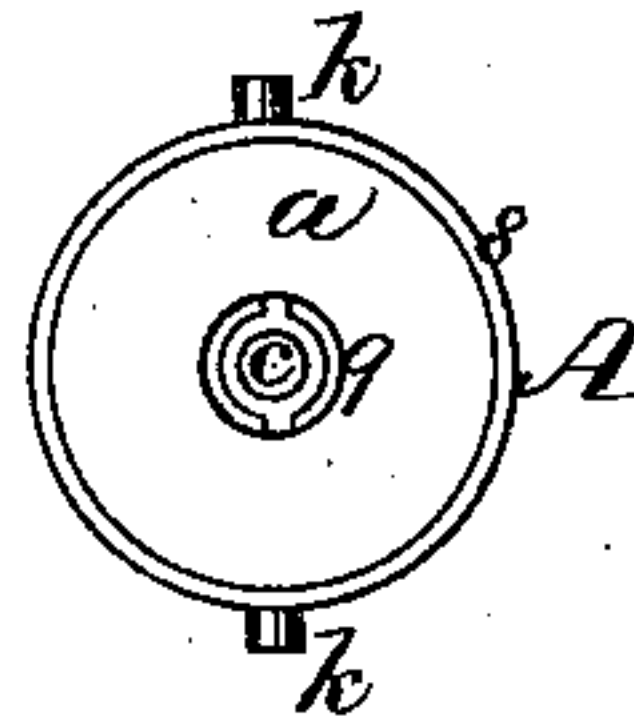


Fig. 5

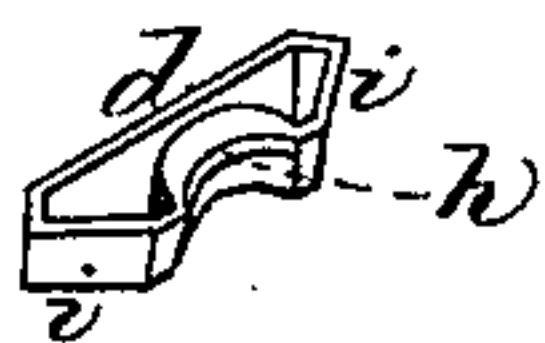
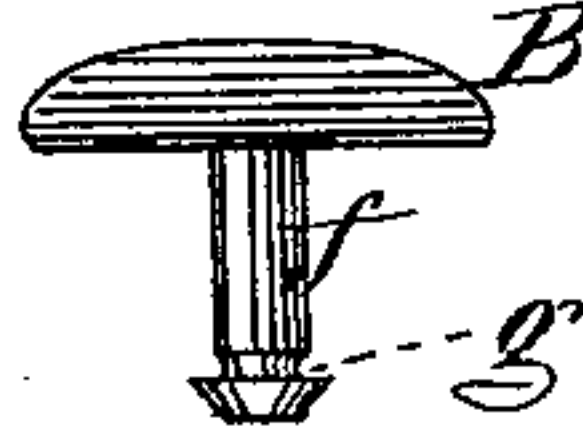


Fig. 6



Fig. 7



Witnesses  
W. J. Cambridge  
Chas. E. Griffin.

Inventor,  
Clarence L. Watson  
per P. E. Tuckermacher  
Att'y

# UNITED STATES PATENT OFFICE.

CLARENCE L. WATSON, OF ATTLEBOROUGH, MASSACHUSETTS, ASSIGNOR  
TO GOULD, WATSON & CO., OF SAME PLACE.

## IMPROVEMENT IN BUTTON AND STUD FASTENINGS.

Specification forming part of Letters Patent No. **217,966**, dated July 29, 1879; application filed  
June 20, 1879.

*To all whom it may concern:*

Be it known that I, CLARENCE L. WATSON, of Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Fastenings for Buttons, Studs, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view, enlarged, of a collar-button or stud constructed in accordance with my invention. Fig. 2 is a vertical section through the center of the same. Fig. 3 is a horizontal section on the line *x x* of Fig. 2. Fig. 4 is a plan of the inner side of the front portion of the stud; Figs. 5, 6, and 7, details.

My invention has for its object to furnish a cheap, simple, and reliable spring-fastening for that class of buttons or studs in which the shoe or rear portion and the front are made detachable from each other to facilitate the insertion and removal of the button; and my invention consists in a button or stud in which one portion is provided with a pair of spring-jaws, each of which is furnished on the inside with a lip or holding-edge, adapted to engage with a shoulder or groove on the outside of the end of the post projecting from the other portion, the jaws being separated against the resistance of their springs to release the post by means of wedge-shaped pushers, which act on the inclined or beveled ends of the jaws, between which they are placed.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the shell which forms the front portion of a collar-button or stud. Within this shell is secured, by solder or otherwise, a thin circular plate or disk, *b*, from the center of which projects a post, *c*, on opposite sides of which are arranged a pair of jaws, *d d*, of the form seen in Figs. 3 and 5, light springs *e e* being placed between the straight backs of the jaws and the curved interior wall of the shell, which serve to press the jaws toward each other,

these jaws, together with their springs, being confined in place within the shell by a covering plate or disk, *a*, which is secured in any suitable manner within the flange or edge 8 of the shell A, and is provided with a central aperture, 9, of larger diameter than that of the post *c*, which passes through it.

B is the rear portion of the button, from the center of the inner side of which projects a tubular post, *f*, which is adapted to fit over the post *c* of the part A, and has formed at its outer end, by striking up the metal or otherwise, an annular groove or shoulder, *g*, with which engages a lip or shoulder, *h*, formed on the curved central portion of each of the jaws *d*, the outer end of the post *f* being of conical or tapering form, which enables it, when pressed in, to separate the jaws *d* against the resistance of the springs *e*, in order to allow the lips or holding-edges *h* to catch over the shoulder *g*, and thus firmly hold or lock the two portions of the button together, as desired.

The opposite ends of each of the jaws *d* are beveled or inclined on the inner side at *i*, as seen in Figs. 3 and 5; and between these beveled ends are placed wedge-shaped pushers *k k*, the shanks of which pass through apertures in the flange 8 of the shell A, and extend out therefrom a sufficient distance to admit of their being pressed in by the fingers to cause the wedges *k* to act upon the inclined sides *i* of the jaws *d* and force them apart against the resistance of the springs *e*, thus withdrawing the lips *h* and releasing or unlocking the post *f*, when the two portions of the button may be readily separated from each other to facilitate its insertion within the garment or its removal therefrom.

On removing the fingers from the ends of the pushers *k* the jaws *d* will be returned by the springs *e* to their original position, ready to again catch the post *f* when forced in over the post *c*, as before described.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a detachable button or stud, the jaws *d*, provided with lips or holding-edges *h* and inclined ends *i*, in combination with a wedge-shaped pusher or pushers, *k*, and the springs *e*,



for locking and holding the post *f* and releasing the same, substantially as described.

2. The combination, with the shell *A* and its post *c*, of the jaws *d*, provided with lips or holding-edges *h* and inclined ends *i*, operated by a wedge-shaped pusher or pushers, *k*, the springs *e*, and the tubular post *f*, with its annular groove or shoulder *g*, adapted to slide on the post *c* and be locked by the jaws to

hold the two portions of the button or stud together, substantially as set forth.

Witness my hand this 12th day of June, A. D. 1879.

CLARENCE L. WATSON.

In presence of—

SAMUEL H. ELDREDGE, Jr.,  
GEORGE A. ADAMS.