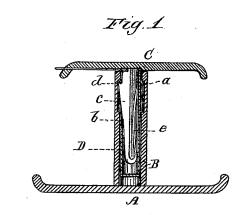
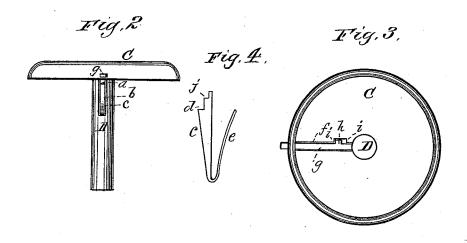
## G. B. FITTZ. Button-Fastening.

No. 205,071.

Patented June 18, 1878.





WITNESSES, Charle F. Exect, Alfred, Boow 1 INVENIOR George B. Fitz, <sup>per</sup>Cha! H. Fowler, Attorney,

## UNITED STATES PATENT OFFICE.

GEORGE B. FITTZ, OF ATTLEBOROUGH, MASSACHUSETTS.

## IMPROVEMENT IN BUTTON-FASTENINGS.

Specification forming part of Letters Patent No. 205,071, dated June 18, 1878; application filed May 4, 1878.

To all whom it may concern:

Be it known that I, George B. Fittz, of Attleborough, in the county of Bristol and State of Massachusetts, have invented a new and valuable Improvement in Button-Fastenings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal vertical section of my invention. Fig. 2 is a detached view of the upper button-plate and tubular shank. Fig. 3 is a plan view of the under side of the top button-plate, and Fig. 4 is a detached view of the spring-catch.

This invention has relation to fastenings for buttons and studs; and the object and purpose are to construct a simple and effective means for securely fastening the two button-plates together, and also rendering them easily separated when desired, while at the same time the general appearance or external ornamentation of the button or stud remains the same.

The invention therefore consists in the general construction of the fastening device and the means for operating the same, as will be hereinafter described, and subsequently pointed out in the claim.

In the accompanying drawings, A represents the shoe or lower button-plate, formed with or having secured thereto a tubular sleeve, B, having formed upon its interior an annular recess or depression, a, which forms a shoulder to hold a spring-catch.

The upper button-plate C is formed with a tubular shank, D, the latter having an elongated slot, b. Within the shank D is placed a spring-catch, c, formed with spring-arm e, said catch having a shoulder, d, to engage with the shoulder formed by the recess a. This spring, it will be noticed, is of peculiar construction, formed of one piece of metal, either cut out or bent around to form the spring-arm e, so that when placed within the tubular shank D both the catch c and spring-arm bear against the interior of the shank, and firmly holds itself in place.

Upon the under side of the plate C is a groove, f, running at right angles to the axis of the shank, which receives a presser-bar, g, formed with stop h, the movement of the bar g being limited in either direction by the stop coming in contact with shoulders i. The stop h and shoulders i not only prevent the spring-catch e from being forced in too far, and the presser-bar, by the action of the spring, from being forced out of the groove f, but also prevent the catch, when the two plates A C are separated or disconnected, from being thrown or forced by the action of the spring-arm e too far out of the slot b.

The catch c has upon its upper end a shoulder, j, against which the inner end of the presser-bar g bears, and the outer end of the bar passes sufficiently beyond the outer rim of the plate C to be operated by the finger when it is desired to separate or disconnect the two plates, which is done by pressing inward the bar g, which also presses in the same direction the catch c, relieving the shoulder d from the shoulder formed by the annular recess a. The catch c, having an inclined face or bearing, is pressed in by the sleeve B sufficiently to allow the tubular shank D to pass into the sleeve until the shoulder d passes below the shoulder formed by the recess a, when the two plates, with their sleeve and shank, are firmly locked to-

gether.

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

A fastening for buttons or studs consisting of the lower plate A, formed with sleeve B, having annular recess a, in combination with the plate C, tubular shank D, and catch c, formed with shoulder d and spring-arm e, said catch being operated by the presser-bar g, having stop h, and working within a groove, f, formed with shoulders i, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE B. FITTZ.

Witnesses:

GEORGE MACKIE, ALFRED H. CHATTERTON.