D. S. PORTER.
Buttons.

No. 230,814. Patented Aug. 3, 1880.

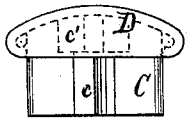


Fig. 1.

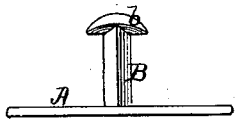


Fig. 2.

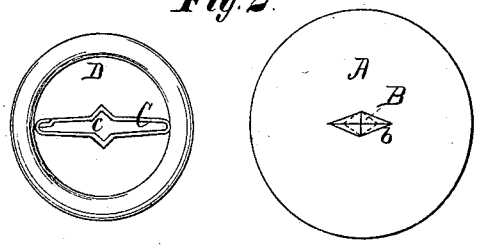


Fig. 3.

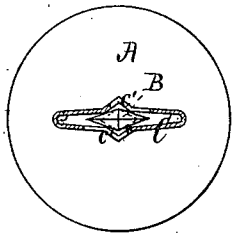


Fig. 4.

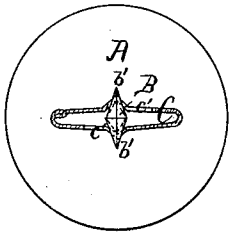
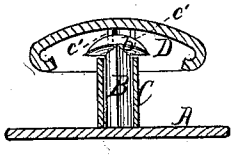


Fig. 5.



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UNITED STATES PATENT OFFICE.

DAVID S. PORTER, OF DAVENPORT, NEW YORK.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 230,814, dated August 3, 1880.

Application filed December 22, 1879.

To all whom it may concern:

Be it known that I, DAVID S. PORTER, of Davenport, Delaware county, in the State of New York, am the inventor of an Improved Fastening for Buttons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention consists in the combination of devices, hereinafter particularly described, and more at length recited in the claim, whereby the button may be readily and conveniently attached to or detached from a shank mounted on a suitable plate, as specified.

Figure 1 is a side elevation of a button-fastening embodying my invention, showing the parts detached from each other. Fig. 2 shows an under-face plan of the button and a top view of the shank and its plate. Fig. 3 is a plan of my button-fastening, the top of the button being removed and disclosing the parts in position when the button and shank are attached together or united, but before the shank is turned or sprung into place to lock it to the button. Fig. 4 is a similar view of the same parts, but showing the shank turned or sprung into a locked position in the button; and Fig. 5 is a vertical central sectional view of my device, showing the shank locked to the button.

A is a plate or disk. On this disk or plate, and rising from it in preferably a central position, is the post or shank B. This post is formed so that the diameter of its cross-section is greater in one direction than in any other, as shown, and the said post is therefore made lozenge shape in its cross-section. I find it preferable to employ the lozenge shape. Upon the upper end of this post or shank is formed the head *b*, which projects beyond the edges or sides of said post, upon either side of the post on the line of its greatest diameter, as seen at *b'*.

Upon the under face of the button D is placed the spring-loop or locking device C. This is composed of a strip of suitable metal bent into the form of a loop, as shown, and with its free ends brought together and united. The center of this loop is bent outwardly upon each side, as shown at *c*, so that a recess is there formed in the loop, which corresponds in outline to the outline of the shank when the latter is placed in the loop with its line of greatest diameter crosswise or at right angles to the length of the loop. This loop is fastened to the under side of the button, which may be done by soldering its edge to the button.

In operating the devices described, the shank is introduced into the loop in the position shown in Figs. 1 and 3—that is, with the line of the greatest diameter of the shank parallel to the length of the loop. In order to permit the shank to be turned in the loop, the walls of the loop immediately below the under face of the button are slotted, as seen at *c'*. When the shank is turned in the loop the projecting ends of the cross-head *b* pass through these slots *c'*, while at the same time, the loop not being continuous or united to the button at these slots, the said loop at its portion *c* will act as a spring when pressed upon by the edges of the shank on the opposite sides of the greatest diameter thereof, and will thus permit said edges to pass when the shank is turned, and will then close or spring down upon the shank again when it has been turned into the position shown in Figs. 4 and 5.

It is evident that when the shank has been turned and sprung into the position shown in Figs. 4 and 5 the button and shank will be locked together, and that to detach the button it is only necessary to turn the shank the reverse way in the recess *c*, when it may be withdrawn and the button detached.

The devices I have shown and described are specially applicable to collar and cuff or sleeve buttons.

By the use of the loop C, of the peculiar construction shown, the button is held steadily in position in a long button-hole, and the recess *c* in the loop C, acting on the corners of the lozenge-shaped shank B, holds said shank perpendicular to the button and prevents it

from turning therein, thus keeping the button and disk always fastened together and their faces parallel.

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

The button D, provided with the elongated hollow spring-shank C, having an enlarged central part of substantially lozenge shape, and also having slots c', in combination with the shoe or disk A, having the lozenge-shaped shank B and T-head, whereby said head is prevented from accidentally turning in the loop or bed, substantially as described, and for the purpose set forth.

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