(No Model.)

O. T. SMITH.

BUTTON, STUD, &c.

No. 301,292.

Patented July 1, 1884.

Fig.I.



Fig.2.

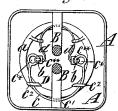


Fig3,

A B a B

C*Cub B b c+c+

Fig4.

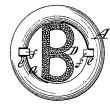
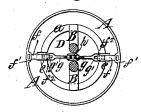


Fig.5, f

Fig.6.



Witnesses:

Matthew Pollock

ille Thuith

Brown Hall

UNITED STATES PATENT OFFICE.

ORVILLE T. SMITH, OF BROOKLYN, NEW YORK.

BUTTON, STUD, &c.

SPECIFICATION forming part of Letters Patent No. 301,292, dated July 1, 1834.

Application filed April 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, ORVILLE T. SMITH, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and 5 useful Improvement in Buttons, Studs, and Analogous Articles of Jewelry, of which the following is a specification.

My invention relates more particularly to sleeve or cuff buttons and studs, but may be 10 embodied in lockets and analogous articles of

jewelry.

The principal object of my invention is to enable retail jewelers to provide a great number of different styles and patterns of buttons, 15 studs, and analogous articles to suit the varied tastes and requirements of customers, by the use of a small number of frames or shells, and a comparatively large number of ornamental center-pieces bearing designs, figures, or inical letters of various forms, and capable of being removably secured in the frames or shells to form any combination which the customer may desire. In this way the retail dealer, by a comparatively small outlay for 5 stock, can meet the requirements of a large trade.

The invention consists in novel combinations of parts hereinafter described and set forth in the claims, whereby the desired ob-

30 ject is attained.

In the accompanying drawings, Figure 1 represents a front or face view of a sleeve or cuff button embodying my invention. Fig. 2 is a back view thereof, with the shoe or back 35 plate removed. Fig. 3 is a vertical section of the button. Fig. 4 is a face view of a button of slightly modified form, also embodying my invention. Fig. 5 is a sectional view of said modified button, and Fig. 6 is a back view of 40 the button with the back plate or shoe removed.

Similar letters of reference designate corresponding parts in all the figures.

I will first describe the button shown in Figs.

5 1 2 and 3

A designates the frame or shell, which is here shown as formed of thin metal, and which is also shown as of rectangular form with rounded corners. In the outer face of the 50 frame or shell A is here represented a rabbet, a, and the post B, which is bifurcated, is se-

cured to the shoe C, and is made to straddle the rabbet a, and is secured to the inside of the shell or frame A.

D designates an ornamental center-piece, 55 which may bear an initial letter—such as "B," for instance—or any ornament likely to be required. In connection with the said frame or shell A, a large number of center-pieces may be had, from which a selection may be made 60 to obtain the desired letter or ornament. The center-piece D is capable of being inserted directly into or placed in the rabbet a of the frame or shell from the front thereof, and can be removed therefrom only by a movement di- 65 rectly outward. In connection with the centerpiece to be so placed in the frame or shell A, I employ locking devices which are accessible from the back of the frame or shell only, and which are preferably spring-actuated. As here 70 shown, the center-piece D has rearwardly-projecting headed studs or pins b, which pass through an opening in the frame or shell A at the bottom of the rabbet a. At the back of the frame or shell is a bow-spring, c, which is se- 75cured in the post Bate, and which is retained in proper place by loops c^2 , attached to the frame or shell. The ends of this spring have in them key-hole slots, or slots consisting of circular portions or eyes c^* and narrow portions c^{**} . 80 The spring c has a tendency to expand, and when its ends are pressed together the centerpiece D may be placed in position in the frame or shell, the heads of the studs or pins b passing through the eyes c^* ; but as soon as the spring 85 is released its ends spring apart, thereby causing the narrow slot portion c^{**} to embrace the stude or pine b behind their heads, and so to hold the center-piece against outer movement. In order to add to the strength of the 90 spring c, I may employ a re-enforcing spring, d, secured in the opposite side or portion of the post B, and having its ends bearing on the ends of the spring c to press them apart. If it is desired to change the center-piece shown 95 for another having a different ornamention, all that is necessary is to press inward the ends of the spring c to bring the eyes c^* opposite the heads of the study or pins b, and the center-piece may then be removed and an- 100 other substituted therefor. In the example of my invention shown in

Figs. 4, 5, and 6 the button consists of a frame or shell, A, a shoe, C, a post, B, rigidly connecting them, and a removable ornamental center-piece, D. The frame or shell is somewhat different in form from that first described; but it has a deep rabbet, a, in which the center-piece D may be placed at the front of the frame or shell. At opposite points in the frame or shell are notches e, which receive 10 springs f, secured at one end by loops f' or otherwise to the frame or shell, and at their other ends notched at f^* to engage the edge of the center-piece D. To insert the centerpiece D, it is simply pressed into the rabbet 15 \bar{a} , and by acting on the springs f deflects them or presses them outward until opposite their notches f^* , whereupon said springs react or fly inward to cause their locking notches to engage with the edge of the center-piece at 20 diametrically-opposite points, and thus hold it securely against outward displacement. By springing the springs f outward the centerpiece D may be removed and a different one

In order to hold the center-piece, D, more securely against outward displacement, I may provide the inner ends of the springs f with T-shaped heads f^2 , which are connected by a tie consisting of two rods or pieces, g g, 30 provided with right and left hand threads at their adjacent ends and connected by a turnbuckle, h. The rods or pieces g g, have in their outer ends elongated holes or slots g', and before they are connected by the turn-buckle 35 h they may be adjusted to a position at right angles to that shown in Figs. 5 and 6, in which position their slots g' may be passed over the T -shaped heads f^2 , and when swung into line they cannot become accidentally disengaged 40 from said heads. The turn buckle \hbar being then applied to the adjacent screw-threaded ends of the rods g, they may be drawn together to contract the springs f tightly upon the edge of the center-piece, D, which cannot then be-45 come disengaged from them. The connection or tie g g h passes between the two portions of the bifurcated post B, and when the centerpiece is to be removed and another substituted, all that is necessary is to turn the buckle h to 50 lengthen the connection or tie.

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

1. In a button or analogous article of jewelry,

the combination, with a frame or shell, of a removable ornamental center-piece capable of 55 being inserted into or placed directly in the frame or shell at the front thereof, and locking devices, substantially as described, accessible from the back of the frame or shell and serving to secure the center-piece therein and pre- 60 vent its outward movement, substantially as and for the purpose herein set forth.

2. In a button or analogous article of jewelry, the combination, with a frame or shell, of a removable ornamental center-piece capable of 65 being inserted into or placed directly in said frame or shell at the front thereof, and spring-actuated locking devices, substantially as described, accessible from the back of the frame or shell and serving to secure the center-piece 7c therein, substantially as and for the purpose herein set forth.

3. In a button or analogous article of jewelry, the combination, with a frame or shell, of a removable ornamental center-piece fitted thereto, and spring-actuated locking devices, substantially such as described, for securing said ornamental center-piece in a manner to permit its removal and exchange for another when desired, substantially as and for the purpose hereto in set forth.

4. In a button or analogous article of jewelry, the combination, with a frame or shell, A, having a rabbeted front, of a removable ornamental center-piece fitting therein and provided with 85 headed pins or studs b, projecting rearward through an opening in the frame or shell, and the locking-spring c, having slotted ends c*c**, engaging with said headed pins or studs, substantially as and for the purpose herein described.

5. In a button or analogous article of jewelry, the combination, with the frame or shell A, having a rabbeted front, of the removable ornamental center-piece fitted thereto and provided with rearwardly-projecting pins or stude b, the locking-spring \dot{c} , having its ends capable of engagement with and disengagement from said pins or stude, and the re-enforcing spring d, all substantially as and for the purpose herein described.

ORVILLE T. SMITH.

Witnesses:

FREDK. HAYNES, C. E. SUNDGREN.