(No Model.)

# C. ERLANGER.

## BUTTON FASTENER.

No. 333,400. Patented Dec. 29, 1885.

Fig. 1

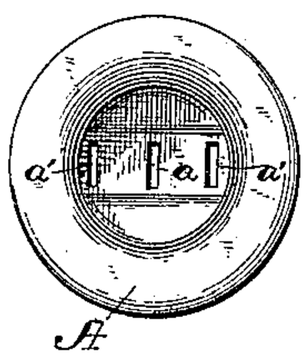



Fig. 2

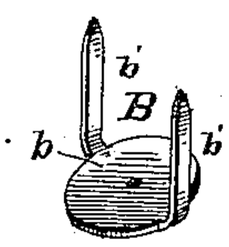



Fig. 3.

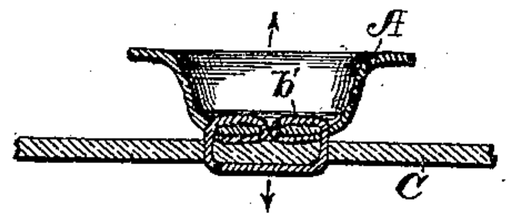



Fig. 2*

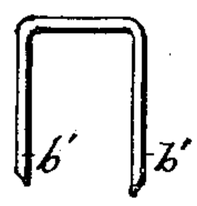



Fig. 4.

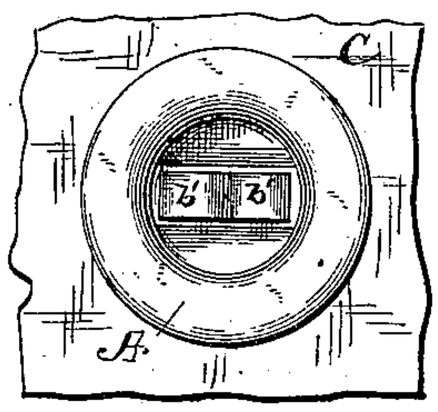



Fig. 5.


Fig. 2**

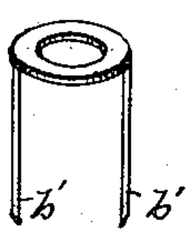



Fig. 6.

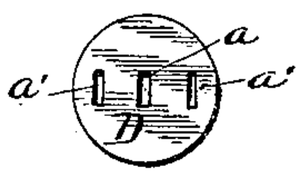



Fig. 7.

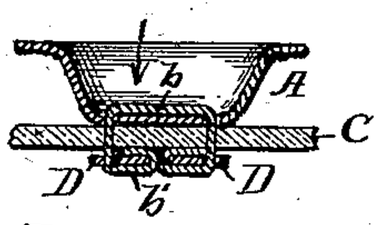



Fig. 11.

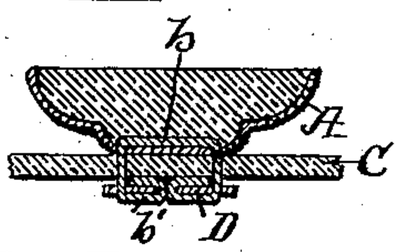



Fig. 12.

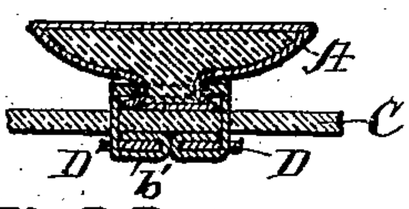



Fig. 8.

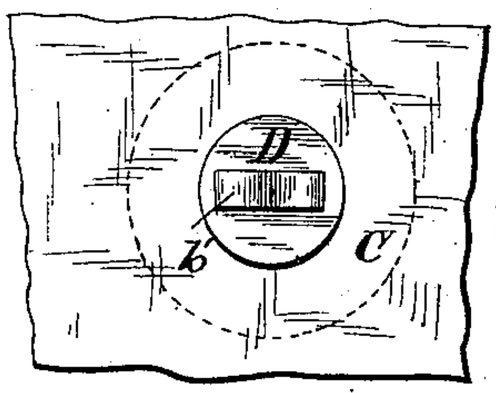



Fig. 9

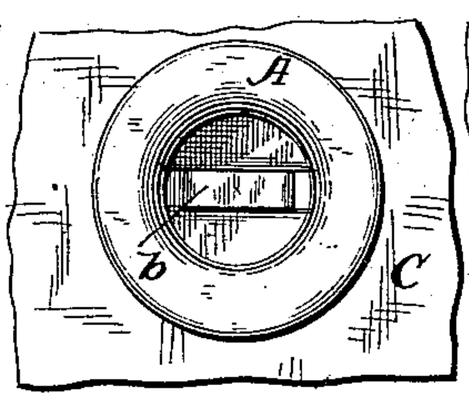
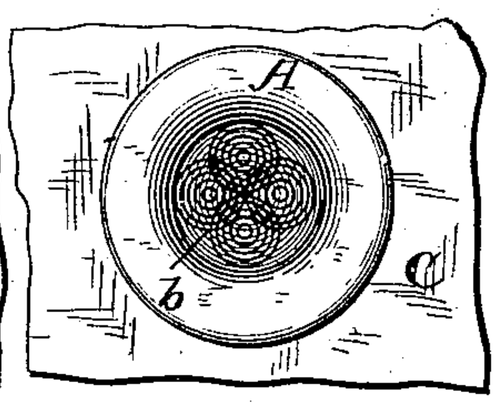



Fig. 10.




Witnesses:
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Jamb. H. Jacobson

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Charles Erlanger
by Abraham & Mayer,
his attorneys.

# UNITED STATES PATENT OFFICE.

CHARLES ERLANGER, OF BALTIMORE, MARYLAND.

## BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 333,400, dated December 29, 1885.

Application filed March 2, 1885. Serial No. 157,548. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES ERLANGER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented a new and useful Improvement in Button-Fasteners, of which the following is a specification.

My invention relates to button-fasteners, and has for its object the provision of means whereby a button shall be securely fastened to the fabric of a garment without risk of withdrawal or tearing the fabric when under tension.

In carrying out my invention a two-pronged staple is passed through the fabric of a garment, after which said prongs are turned over on a line substantially following the plane of the button-dish or an attached washer-plate, and then said prongs are returned upon an opposite surface of the button or plate, so as to form an embracing-loop, in such a manner that the points of the prongs shall be covered up and concealed.

My invention can be carried into practice by first inserting the prongs rearwardly through the fabric, and thence upwardly through the cable-holes of a button; or said prongs may be inserted from the front side, and thence downwardly through the fabric, in which latter case a rear washer or plate is employed; but in all forms the prongs are turned over and returned, so as to form an embracing-loop.

My invention further consists in combinations of the several parts, all as hereinafter fully described, and set forth in the claims.

Referring to the accompanying drawings, in which similar letters of reference point out like parts on each figure, Figure 1 is a top view of a button employed in carrying out my invention when a staple is inserted from the rear upwardly through the fabric. Fig. 2 is a perspective view of a staple provided with a disk bridging the prongs. Fig. $2^{\times}$ represents a plain wire staple. Fig. $2^{\times\times}$ represents a staple with a disk having an opening therein. Fig. 3 is a sectional view of a button attached to a piece of fabric wherein the devices shown in Figs. 1 and 2 are employed. Fig. 4 is a top plan view of Fig. 3. Fig. 5 is a view of the staple shown in Figs. 3 and 4, the button and fabric being removed. Fig. 6 represents a three-holed washer-plate. Fig. 7 is a sectional view of a two-holed button fastened to a piece of fabric by means of a staple shown in Fig. $2^{\times}$ and a plate shown in Fig. 6. Fig. 8 is a rear view thereof. Fig. 9 is a top plan view showing the employment of a wire staple inserted downwardly through a two-holed button. Fig. 10 is a like view showing the employment of a staple, with a disk bridging the prongs, said disk being ornamented. Fig. 11 is a sectional view of my invention applied to a covered button. Fig. 12 is a like view of a covered button wherein holes in the dish of the button are dispensed with, and an open-headed staple, as shown in Fig. $2^{\times\times}$, is employed in combination with a washer-plate, as illustrated in Fig. 6.

In the drawings, A is a button; $a\,a'\,a'$, cable-holes; B, a staple; $b$, the disk thereof; $b'\,b'$, its prongs; C, fabric; D, a washer-plate.

I will first describe my invention as illustrated in Figs. 3 and 4. In this form the prongs $b'\,b'$ are first passed through the fabric C, and each of said prongs is then inserted through a respective hole, $a'$, and then turned over upon the dish of the button toward the central hole, $a$. They are then both turned downwardly through said central hole, after passing through which they are then turned back under the button-dish outwardly in opposite directions, thus forming two embracing-loops, as plainly shown in Fig. 3. It will be seen that the outer surfaces of the two prongs where they pass through the central hole, $a$, are close together, and it is manifest that when tension is applied in direction of the arrows the tendency will be to crowd these surfaces at their point of juncture within said hole. It will be observed that one arm of each of the bows formed by bending over the prongs $b'$ rests upon the surface of the fabric C; and it will be further observed that the extreme points of the prongs rest against or nearly against a respective inner side surface of each prong.

I will now describe my improvement wherein I insert the prongs of the staple downwardly and turn them over upon the under side of the fabric, and wherein I employ a three-holed washer-plate, Fig. 6, this form being but an equivalent of what has been already described, the gist of my invention being that the prongs $b'$ of a staple shall be bent over and returned, so as to embrace two surfaces of either the dish of a button or a washer-plate, and that the bent

prongs shall lie over and under and against said dish or plate and be substantially in alignment with its plane, as the case may be. The washer-plate D is provided with a central hole or slit, *a*, and two side ones, *a' a'*, similar to those upon the button A, Figs. 1, 3, and 4. A staple, Fig. 2 or 2×, is passed through a two-holed button, or through the fabric of a covered button, with the points of the prongs downward. Said prongs are then each passed through a respective opening, *a'*, of a plate, D, at the rear of the fabric, then are bent over the lower surface of said plate, then upwardly through the central opening *a'*, and then returned outwardly toward the periphery of said plate upon its opposite surface, as plainly shown in Figs. 7, 8, and 9. Said figures show a plain wire staple, Fig. 2×; but it is manifest that a staple with a bridge-disk, *b*, Fig. 2, may be employed and be within the scope of my invention, and said disk may have an ornamental outer surface. (See Fig. 10.)

Fig. 11 illustrates the practice of my invention in connection with a covered button, the staple being inserted within the rear shell thereof, and then passed through the fabric and through the openings *a a' a'* of a rear washer-plate, D, and looped thereon in the same manner as described in respect to Fig. 7.

Fig. 12 illustrates another form of practicing my invention, in which I employ a ring-headed staple, Fig. 2××. In this form the shell of a covered button has a flange, *f*, onto which said ring is sprung, and then the prongs, after being passed through the fabric C, are bent over and returned upon a plate, D, as plainly illustrated in Fig. 12. If tension is applied in direction of the arrows, as it always will be when the device is in use, the extreme points of the prongs will first impinge against the inner sides of the prongs. The turned-over loops will press against the surface of the fabric C and pack said fabric against the surface of the staple-disk or washer-plate, and it will be practically impossible, with the strain to which such appliances are subjected, to straighten out the prong ends. Added to this, said tension and strain will immediately be resisted by the juxtaposited bent-over portions of the prongs within the central hole, *a*. Thus I provide a method and means for firmly fastening buttons upon fabrics in a simple and inexpensive manner, resisting upward and downward strain and lateral tension in a right and left direction all at the same time.

I have provided a machine for readily adjusting the staple in place that will turn it over outwardly and inwardly into the positions shown in the drawings, for which machine I am about applying for Letters Patent, and which it is not necessary herein to describe.

What I claim is—

1. In a button-fastening device, the button A, having three cable-holes, *a a' a'*, in alignment, in combination with a two-pronged staple, B, the prongs of which are adapted to be turned over laterally upon one surface of the button-dish, and returned in opposite directions on the other surface of said dish, whereby said prongs form lateral embracing-loops, substantially as described.

2. The combination, with a piece of fabric, of a button provided with three aligning cable-holes, and a staple having prongs bent over upon one surface of said button and returned over the other surface thereof, whereby the dish of the button is embraced by loops in opposite directions, substantially as described.

CHARLES ERLANGER.

Witnesses:
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