

S. W. SHOREY.  
BUTTONS.

No. 187,325.

Patented Feb. 13, 1877.

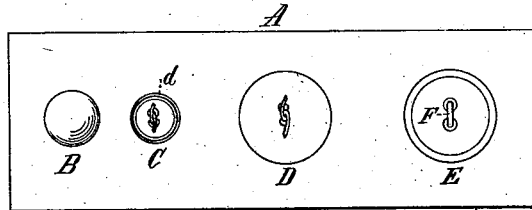


Fig. 1.

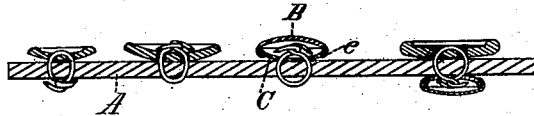


Fig. 2.

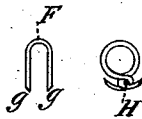


Fig. 3.

*Witnesses:*  
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# UNITED STATES PATENT OFFICE.

SAMUEL W. SHOREY, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. 187,325, dated February 13, 1877; application filed October 12, 1876.

*To all whom it may concern:*

Be it known that I, SAMUEL W. SHOREY, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Staple-Fastened Button, of which the following is a specification:

The object of my invention is to produce a device which may be readily and rapidly applied to buttons of various descriptions, for the purpose of permanently and firmly attaching them to cloth, leather, and all fabrics whereon buttons are used.

My invention consists of a staple, constructed of wire of various and suitable sizes, and so formed as to have its arms cut or pointed into an angle, in such manner as shall leave its longest extremes on the inside of each arm. Said angles are for the purpose of facilitating the passage of the staple through the fabric, as also to avoid undue resistance to opposing surfaces, the angles on the points being uppermost for this purpose after the process is complete of locking.

To attach buttons to goods, the staple is passed through the eye of the button, from thence through the fabric, and finally through proper apertures in a raised-rim circular-shaped device of metal, technically known as a "back." Here the two extremes of the staple are brought together and twisted in such a manner as to form a complete and secure lock on the concave side of said back, without the aid of solder or any auxiliary fastening, thus permanently securing the button. To render the operation more complete, and impart a better finish, another similarly-shaped device of metal, and recognized as a "cap," is placed over the open face of the back and pressed down upon it, thus closing in and effectually covering the twisted or locked ends of the staple, and securely and permanently held in this position by the proper compression of the raised rim on the cap over the corresponding rim with which the back is provided, the utility of my invention being more fully set forth in the accompanying drawings, in which—

Figure 1 is a plan view of a piece of goods with buttons variously attached by my improved process. Fig. 2 shows a section of fabric and buttons, caps, and backs, exhibiting various methods of applying and attach-

ing the buttons. Fig. 3 is a view of wire staple before and after being locked.

In the drawings, A represents the fabric; B, a cap, completed, and securing a button supposed to be on the opposite side of the fabric; C, a back, with raised rim *d*, showing the cap B removed, and exposing the locked ends of the staple in the center; D, view of button secured by the staple only, and intended for the cheaper line of goods; E, upper and plan view of button regularly attached by the staple F.

Fig. 2 are sectional views of buttons attached in different ways, exhibiting the staples reversed, with the lock or clinch formed on either side of the fabric.

If preferred, the cap and back, after properly uniting, and connected to the cloth by the staple only, may be substituted for a regular button, (by this method decreasing one-half the expense,) as shown in section at B, which also exhibits the compressed rim *e* of the cap B over the corresponding rim on the back C.

Fig. 3 shows the points or angles on the arms *g g* of the staple F, with said arms locked, as at H, bringing the angles outward and points down, resting against the back, to avoid resistance to opposing surfaces, when not covered by the cap.

The arms of the staple may be locked, clinched, or twisted in any manner, though it is preferable to secure them as exhibited. The staples and backs may be also used for other purposes, as stays to corners of pockets and similar parts requiring strength, either with or without the caps, the staple being locked on either side.

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

The combination, with the back C, having the raised rim *d*, of the staple F and cap B, adapted to be secured to the back, and to cover the ends of the staple, all substantially as shown, and for the purpose described.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

SAMUEL W. SHOREY.

Witnesses:

H. C. HARROWER,  
M. A. GLINES.