(No Model.)

F. A. SMITH, Jr.

BUTTON FASTENER.

No. 336,167. Patented Feb. 16, 1886.

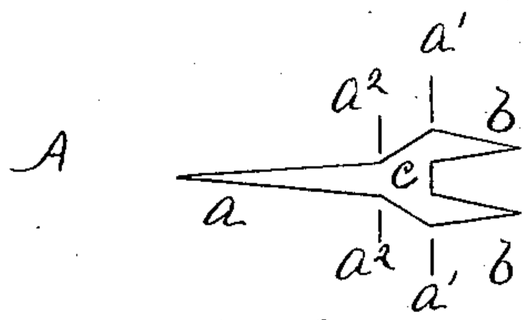

Fig. 1.

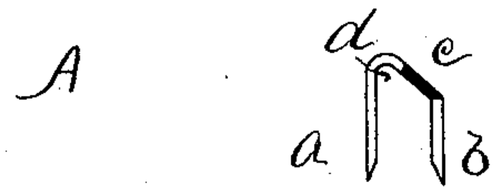

Fig. 2.

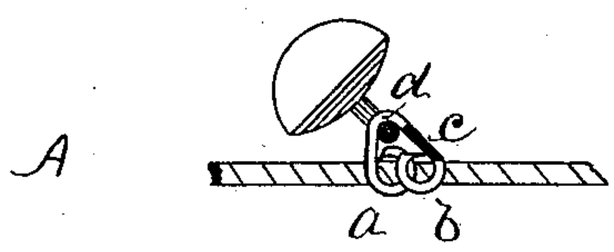

Fig. 3.

Witnesses:

Charles. Greene.

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UNITED STATES PATENT OFFICE.

FRANKLIN A. SMITH, JR., OF PROVIDENCE, RHODE ISLAND.

BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 336,167, dated February 16, 1886.

Application filed December 11, 1885. Serial No. 185,333. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN A. SMITH, Jr., a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Button-Fasteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to a new and useful improvement in the formation of button-fasteners of that class which are provided with penetrating-prongs, by means of which they are secured to fabric; and it consists, primarily, of a metallic button-fastener composed of a table provided with penetrating-prongs, which are bent in parallel planes so as to form an inclined table, whereby when the said prongs are passed through the fabric and clinched a firmer hold of the fabric is attained and a more durable fastener produced.

Figure 1 represents a plan view of the blank from which my improved fastener is made; Fig. 2, a side elevation of the same bent to form. Fig. 3 represents the fastener with button when secured to fabric.

In the present instance my improved fastener consists of the table *c* and the prongs *b b*, projecting from one side, and the button-holding prong *a*, projecting from the other side thereof, the whole formed from the blank A, cut from the sheet metal, as shown in Fig. 1. The sides of the table *c* are cut tapering from the line *a'* at the junction of the prongs *b b* with said table to the line a^2 at the junction of the prong *a*, as shown, to allow a freedom of movement to the button when the fastener is secured to fabric, and also to reduce the weight of metal by doing away with the side wings, as in the usual form of three-prong fasteners now in use.

In forming the fastener from the blank A the prong *a* is bent near its junction with the table *c*, so as to form an inclined table, forming the loop *d* for the reception of the eye of the button, the prongs *b b* being bent on the line *a'*, parallel with the single prong *a*, as fully shown in Fig. 2.

The eye of the button being passed over the prong *a* into the loop *d*, the connected button and fastener are placed in one member of a suitably-organized machine, and the prongs *a* and *b b*, after being pressed through the fabric, are clinched, thereby securely attaching the button, as fully shown in Fig. 3. Thus it will be noticed that but two bends are imparted to the blank in forming the fastener, and these at points where it does not materially weaken the metal of the same.

The table standing at an angle to the fabric when attached thereto allows the ends of the prongs to separate the fabric from the under side and be clinched in the space between the fabric and the under side of the table, thereby retaining a firmer hold of the fabric than if the table lay flat on the surface.

Having described my invention, I claim—

A button-fastener consisting of a substantially-triangular table having one prong at the apex thereof, and another prong or prongs on the base, said prongs being bent in parallel planes and so as to form an inclined table, substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

FRANKLIN A. SMITH, JR.

Witnesses:

CHARLES GREENE,

GEO. W. PRENTICE.