(No Model.)

G. W. PRENTICE.

BUTTON FASTENER.

No. 291,935. Patented Jan. 15, 1884.

Fig. 1.

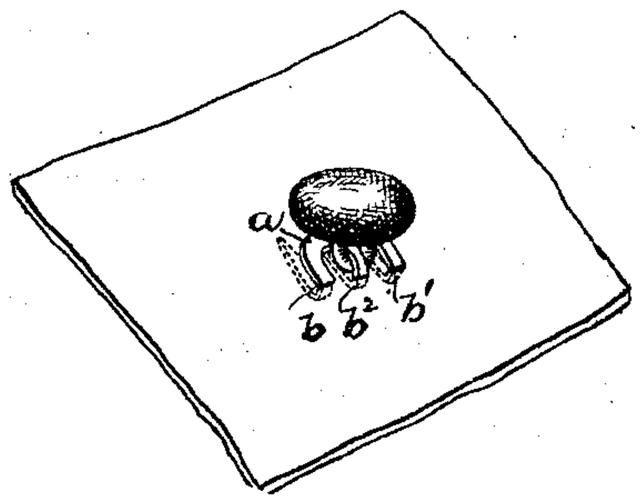


Fig. 2.

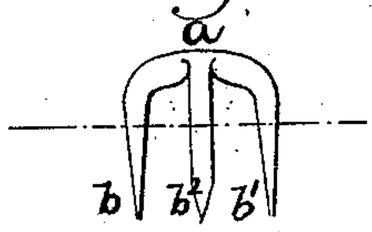


Fig. 3.

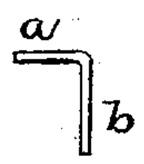


Fig. 4.

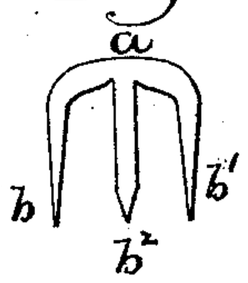
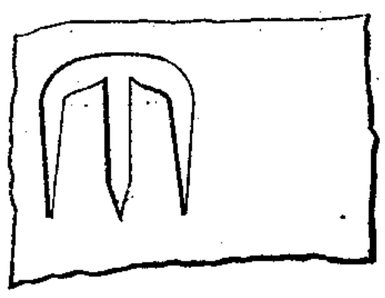


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE W. PRENTICE, OF PROVIDENCE, RHODE ISLAND.

BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 291,935, dated January 15, 1884.

Application filed November 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PRENTICE, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented an Improvement in Button-Fasteners, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to button-fasteners, preferably of that class known as "prong fasteners," and composed of a table or plate having several prongs integral therewith, the said fasteners being adapted to be secured to an article of apparel by means of the prongs, which are caused to penetrate the same and thereafter clinched.

Button-fasteners of the class mentioned have heretofore been provided with prongs located one or more on opposite sides of the plate or table, the said prongs being generally designated as "front and back prongs," and one of said prongs—usually the single and only back prong—has been swaged or formed near its heel into a loop adapted to receive and carry the shank-eye of a button. When a button-fastener of this class carrying a shank-button is secured to the upper of an ordinary button gaiter or shoe—the purpose for which said fastener is more especially designed—it is found that in the act of buttoning the shoe onto the foot with the aid of the ordinary button-hook, a direct outward pulling strain and a more or less sidewise or torsional strain is exerted, mostly on the single back or button-carrying prong, whereby such strain, instead of being distributed upon and resisted by all the prongs, is mainly resisted by said back prong, which is really the weakest point of said button-fastener.

The object of this my present invention is to enable the back prong or prongs to be dispensed with, and to cause the strain exerted on my improved button-fastener to be distributed upon and borne by all the prongs.

To these ends my invention consists, primarily, of a metallic button-fastener composed of a table with several prongs projecting from one side or edge thereof only, and adapted to receive the shank-eye of a button on one of said prongs, and so disposed as to cause the strain to be borne by all of said prongs, substantially as hereinafter described, and particularly pointed out in the claims.

Figure 1 is a perspective view of my improved button-fastener, carrying a button and attached to a section of material. Fig. 2 is a plan of the button-fastener, showing in dotted lines the point where the prongs are to be bent at right angles to the table. Fig. 3 is a side view thereof, showing the prongs as being bent at right angles to the table. Fig. 4 is a plan view of the blank from which the button-fastener is produced, and Fig. 5 shows a piece of sheet metal from which the blank shown in Fig. 4 was cut.

In the present instance the button-fastener is composed of a somewhat crescent-shaped table, *a*, with two prongs, *b b'*, projecting from the extremities or outer portions of the lower edge, *c*, and a middle or button-carrying prong, b^2, projecting from the center of the said lower edge, the whole stamped or struck in one piece from sheet metal of suitable thickness. The table *a* is partially cut away at its lower edge and near the center thereof, so as to permit the heel of the middle prong, b^2, to be carried above a line intersecting the heels of the outer prongs, *b b'*, as clearly shown in Fig. 3, the purpose of which will be presently set forth. Viewing the blank, the prongs *b b'* b^2 are preferably parallel with each other, and are flat or in the same plane as the table *a*. The prongs are bent in the usual manner, at right angles to the table *a*, as shown in Fig. 3, and the middle prong, b^2, which is separated from the outer prongs by intervening spaces, is of a size to permit it to be readily passed into the shank-eye of a button, so that the said shank-eye will encircle said prong at its heel, when the button-fastener may be secured to a fabric in the ordinary way. By carrying the heel of the middle prong above or beyond those of the outer prongs by cutting away the table, (as stated hereinbefore, and as more clearly shown in Fig. 2.) the said table is brought nearer to and disposed more fully around the eye of the button when the latter is secured in place, and thus affords a metallic

bearing surface or plate for the button and for the curved end or partial loop of the ordinary button-hook when it is used in the act of buttoning. The points of the prongs are preferably in the same line, and to carry out my invention they must be forced into and secured to the fabric in the same plane, so then when strain is applied to the button (held on the middle prong) in the act of buttoning, the said strain will be distributed over and be borne equally or almost equally by all the prongs.

Having thus described with particularity one form of button-fastener containing my invention, it is evident that without departing from the spirit of my said invention the size and configuration of the table *a* can be changed very considerably; that the outer prongs can be made to taper from heel to point, or be otherwise modified, and that the heels of all the prongs may be brought in line with each other and the middle or button-carrying prong be bent or swaged to form a staple to receive the shank-eye of the button; or, still further, the said middle prong may be bent partially over the table and then upon itself to bring the shank-eye of a button held on said middle prong over and about in the center of the table *a*. In all these cases the prongs must project substantially in the same direction from one side or edge of the table, and be disposed or adapted to enter the fabric in the act of fastening in a given plane.

What I claim is—

1. A metallic button-fastener, composed of a table and three or more prongs projecting in substantially the same direction from one side or edge of the table, bent at right angles thereto, and adapted to receive the shank-eye of a button on one of said prongs, and to enter or be forced into the fabric or article to which the fastener is to be secured in line with one another, for the purpose set forth.

2. An improved metallic button-fastener, composed of a table and three integral substantially-parallel prongs, with intervening spaces, the said prongs projecting from only one side or edge of the table and bent at right angles thereto, and the heel of the middle or button-carrying prong disposed in a different plane to that of the heels of the outer prongs, all of the said prongs being adapted to enter or be forced into a fabric or article of apparel in one and the same plane, substantially as and for the purpose set forth.

3. The one-piece metallic button-fastener, consisting of the table *a* and the parallel prongs *b b′ b²*, projecting from only the lower edge, *c*, of the said table, with the heel of the middle or button-carrying prong, *b²*, above or out of line with the heels of the prongs *b b′*, the said prongs *b b′ b²*, being bent in a given plane at right angles to the table *a*, all as shown and described, and for the purpose set forth.

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

GEORGE W. PRENTICE.

Witnesses:

FRANKLIN A. SMITH, Jr.,

CHARLES GREENE.