(No Model.)

G. W. PRENTICE.

BUTTON FASTENER.

No. 303,045. Patented Aug. 5, 1884.

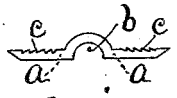

Fig. 1.

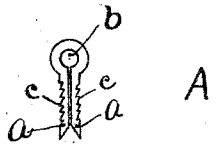

Fig. 2.

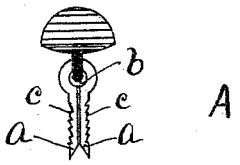

Fig. 3.

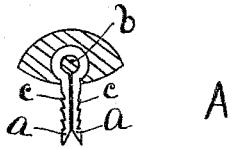

Fig. 4.

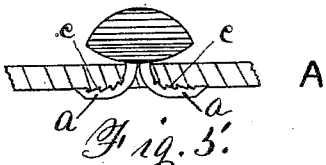

Fig. 5.

Witnesses.
Charles Greene
E. Fishes.

Inventor.
George W. Prentice
by Franklin A. Smith Jr.
Atty.

UNITED STATES PATENT OFFICE.

GEORGE W. PRENTICE, OF PROVIDENCE, RHODE ISLAND.

BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 303,045, dated August 5, 1884.

Application filed June 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PRENTICE, 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-Fastening Devices; 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.

My invention has for its object to provide a new and novel construction of fastener designed to be used in connection with an eye-shank button or embedded in a button-head, and furnishes the means for attaching the same to fabric.

To this end my invention consists, primarily, in providing that portion of the prongs of a metallic fastener which comes in contact with a fabric to which it is attached with corrugations, by means of which the prongs are retained in the fabric with a firmer hold when attached thereto, and are rendered less liable to pull out or become disengaged, the improvement arranged and adapted for use as will be hereinafter more fully described.

In the accompanying drawings, Figure 1 represents a blank or wire from which my improved device is formed. Fig. 2 is a side elevation of a fastener embodying my improvement. Fig. 3 is a similar view as attached to the shank of an eye-button. Fig. 4 is a sectional view showing my improved fastener combined with a button-head. Fig. 5 represents the same as attached to fabric.

Similar letters of reference indicate like parts in the several figures.

To illustrate my invention I have shown a staple-formed fastener such as is described in United States Patent No. 269,738, dated December 26, 1882. Although my improvement is applicable to any device which depends on prongs for attachment to a fabric, I have shown my improved device as applied to an eye-shank button, as in the above-mentioned patent, also combined with a solid head, making a combined button and fastener, it being equally adapted to both devices.

In carrying out my invention the fastener A is preferably formed of half-round wire, although any form of wire may be used. The wire is first cut a suitable length and bent at its center to form the loop *b*, having the prongs *a* extending from said loop. The upper portion of the prongs is corrugated or serrated similar to saw-teeth nearly their entire length, as shown at *c* in Fig. 1, the under portion of the prongs remaining smooth. The fastener is then doubled together, bringing the smooth surfaces toward each other, the corrugations *c* being on the outer sides, forming the complete device shown in Fig. 2. The ends of the prongs are beveled to aid in penetrating the fabric, also to more readily separate on coming in contact with a die in attachment. If the fastener is used in connection with an eye-shank button, as shown in Fig. 3, the eye may be inserted in the loop of the fastener either before or after bending it together, as described in the above-mentioned patent. If the fastener is used in connection with a solid head, the loop *b* is embedded in the material of which said head is composed during the operation of forming the same, the corrugated prongs protruding from the lower surface of the button, as shown in Fig. 4. The method of attaching buttons to fabric by means of my improved device is the same as is in common use, the prongs being passed through from the upper surface of the fabric and bent upon the lower surface, the corrugated sides of the prongs coming in contact therewith, as shown in Fig. 5, the opposite sides of the prongs being smooth where they come in contact with the person.

By means of my improvement I am enabled to provide a fastener with prongs which will retain a firm hold on the fabric when attached thereto, as the corrugations sink into the fabric, and are not liable to slip or become easily disengaged, thus making the fastener superior in holding capacity than those in common use. The portion of the prong which comes in contact with the person, being smooth, as before stated, will not abrade the flesh or catch into anything coming in contact with them. The

form of the corrugations is shown similar to saw-teeth. This shape gives the best result; but other forms may be used which would be the equivalent of the ones herein shown.

The fasteners may be cut from sheet metal, if preferred to the wire herein described. As previously stated, the corrugated or serrated prongs are equally adapted for use on all devices which depend on prongs for attachment to a fabric.

Having described my invention, I claim—

1. A fastening device provided with prongs, which are corrugated or serrated on the side which comes in contact with a fabric when attached thereto, the opposite side of said prongs being smooth, adapted for use substantially as herein set forth.

2. A fastening device the prongs of which are corrugated or serrated on one side and smooth on the opposite, in combination with a solid button-head, the upper portion of said corrugated prongs being embedded therein during the process of manufacture, the lower portion of said prongs protruding from the bottom surface of the button-head, the whole arranged and adapted for use substantially as described.

3. The fastener A, consisting of the loop *b* and prongs *a*, said prongs provided with corrugations *c* on the outer surface, the inner surface being smooth, arranged and adapted for use substantially as described.

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

GEORGE W. PRENTICE.

Witnesses:

FRANKLIN A. SMITH, Jr.,

E. FISHER.