(No Model.)

T. PORTER.

BUTTON AND BUTTON FASTENER.

No. 301,269. Patented July 1, 1884.

Fig. 1.

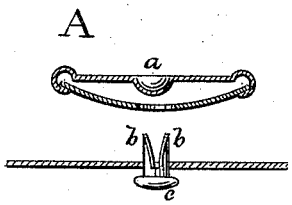


Fig. 4.

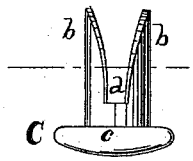


Fig. 2.

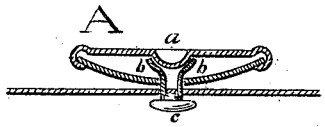


Fig. 6.

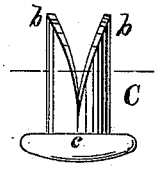


Fig. 5.

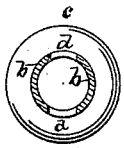


Fig. 3.

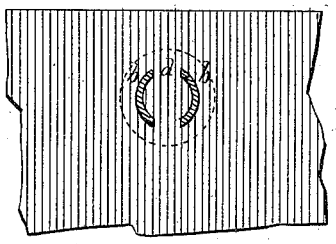


Fig. 7.

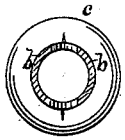


Fig. 8.

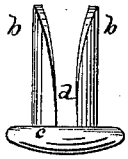


Fig. 9.

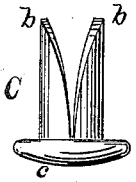
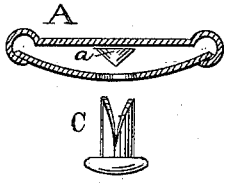


Fig. 10.



WITNESSES:

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D. A. Carpenter.

INVENTOR:

Thomas Porter

BY

ATTORNEY

UNITED STATES PATENT OFFICE.

THOMAS PORTER, OF MONTCLAIR, NEW JERSEY, ASSIGNOR TO THE PATENT BUTTON COMPANY, OF WATERBURY, CONNECTICUT.

BUTTON AND BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 301,269, dated July 1, 1884.

Application filed April 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS PORTER, of Montclair, county of Essex, and State of New Jersey, a citizen of the United States, have invented a new and useful Improvement in Buttons and a Metallic Fastening therefor, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to buttons and analogous devices designed to be attached to garments by means of metal fastenings; and the invention consists in a button or similar contrivance with a solid face, having a device to deflect or upset the bifurcated or other prongs of a metal rivet or fastener, in combination with a fastening device having two or more sharpened prongs, consisting of vertical sections of a hollow cylinder with curved cross-sections, and provided with a head, as is with greater particularity hereinafter shown, described, and claimed.

In the accompanying sheet of drawings, Figure 1 is a vertical section of button or rivet-head and fastener in elevation; Fig. 2, a vertical section of button and fastener when attached to garment; Fig. 3, a plan of fabric, with cross-section of rivet; Fig. 4, an elevation of fastener, showing throat *d;* Fig. 5, a plan of fastener with throat *d;* Fig. 6, an elevation of fastener without throat; Fig. 7, a plan of fastener without throat; Fig. 8, an elevation of fastener with throat extending to head of same; Fig. 9, an elevation of unthroated rivet with prongs extending to head; Fig. 10, a vertical section of button with separately-inserted deflecting device, and elevation of rivet.

The purpose of this invention is to combine with a button or rivet-head, or similar contrivance with a solid face, a metal fastening device which shall have two or more sharpened prongs, consisting of vertical sections of a hollow cylinder with curved cross-sections and a head, so that the sharpened ends or points of the prongs can, without much effort, be forced through the fabric of a garment or other material, and then have its sharpened ends upset by a deflecting device fixed to or within the inner surface of the shell of a button or rivet-head. To properly combine a metal button or rivet-head with a sharpened pronged fastening device, I construct the button A or a rivet-head with a conical depression, *a*, formed in its shell, or by placing within the shell of the button or rivet-head any suitable device or contrivance that will answer the purpose designed, whether this contrivance form part of the button-shell or whether it be merely inserted within the same. A fastening device, C, is next constructed, and this device may have two or more prongs, *b*, consisting of vertical sections of a hollow cylinder with curved cross-sections. The prongs, however, under all circumstances, must be sharpened and provided with a suitable head, *c*. This head may be integral with the metal of the prongs, which is preferable, or it may be attached to the base of the prongs in any suitable manner.

Now, when my button or rivet-head and its fastening device are constructed substantially in the manner hereinbefore described, it is operated by thrusting the sharpened prongs *b* through the desired fabric until the prongs protrude on one side of the fabric and their head *c* shall lie snugly against the other side, a button, A, or rivet-head, with a solid face, being then placed so that the sharpened ends of the prongs will be received within the shell of the button or of the rivet-head, and in contact with the cone or other device, *a*. Suitable pressure being applied to the button or rivet-head, the sharpened ends of the prongs *b* are upset or turned outward by the action of the cone or upsetting device in the button-shell, which, entering between the prongs, curves them outward to an extent greater than the diameter of the orifice in the button-shell through which they originally entered, thereby uniting the button or the rivet-head, as the case may be, firmly to its metal fastener, and tightly holding the fabric clamped between the head of the fastener and hub of the button or under surface of the rivet-head.

To facilitate the thrusting of the fastening device through the fabric, and at the same time to more perfectly secure or fix the fastening device to the fabric, it will be advantageous to form a space, *d*, at or near the base of the sharpened prongs *b*, this space consisting, substantially, of a throat, into or across which

will lie a strip of the fabric when the prongs are thrust through it, and this strip will act as a tie in conjunction with the fabric which is clamped between the inner surface of the head *c* and the button or rivet-head, as before described.

The advantage derived from making the sharpened prongs from a hollow cylinder is, that the curvature of the inner and outer surfaces of the prongs renders them stiffer and less liable to bend when thrust through the fabric, and causes them to upset or flare outward with greater certainty when in contact with the deflecting device than would otherwise be the case.

I do not desire to claim in this patent the particular construction of the fastening device hereinbefore described, for that has been substantially described and claimed in Letters Patent Nos. 247,088 and 251,265, granted to Edward Maynz; nor do I desire to claim, broadly, a button-head with an interior deflecting device combined with pronged fastener, for such is shown in Letters Patent Nos. 197,959, 200,018, and 207,706, granted to Charles E. Bates; but the Bates fasteners were merely flat-sided prongs stamped from sheet metal, and his buttons generally had perforated faces; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. The combination of a headed fastening device provided with two or more sharpened prongs, consisting of vertical sections of a hollow cylinder with curved cross-sections, and a solid-faced button or rivet-head, with an upsetting device within the shell of the same, as and for the purpose described.

2. In combination, a solid-faced button or rivet-head having an interior upsetting device, with a metal fastener having two or more sharpened prongs, consisting of vertical sections of a hollow cylinder with curved cross-sections, a head, and a space or throat, *d*, as and for the purpose described.

THOMAS PORTER.

Witnesses:
G. M. PLYMPTON,
D. A. CARPENTER.