

(No Model.)

W. M. HAZEL.
BUTTON FASTENING.

No. 272,836

Patented Feb. 20, 1883.

Fig. 1.

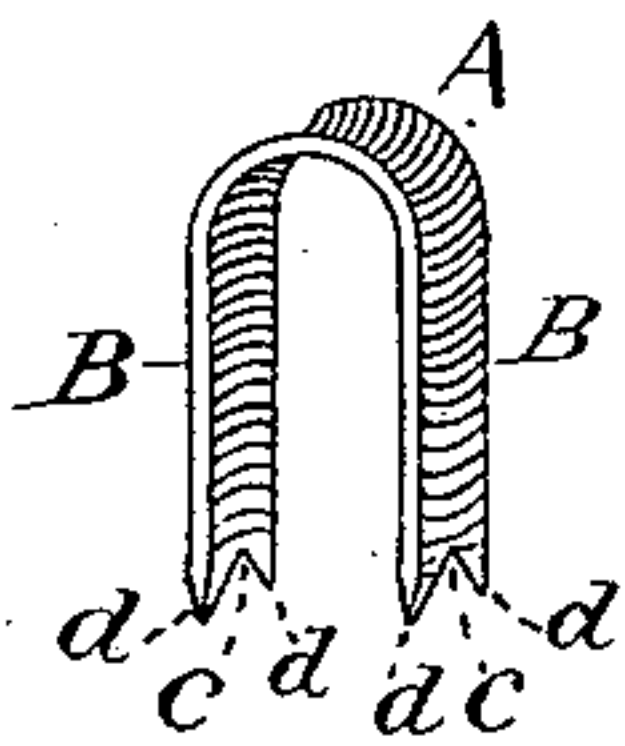


Fig. 2.

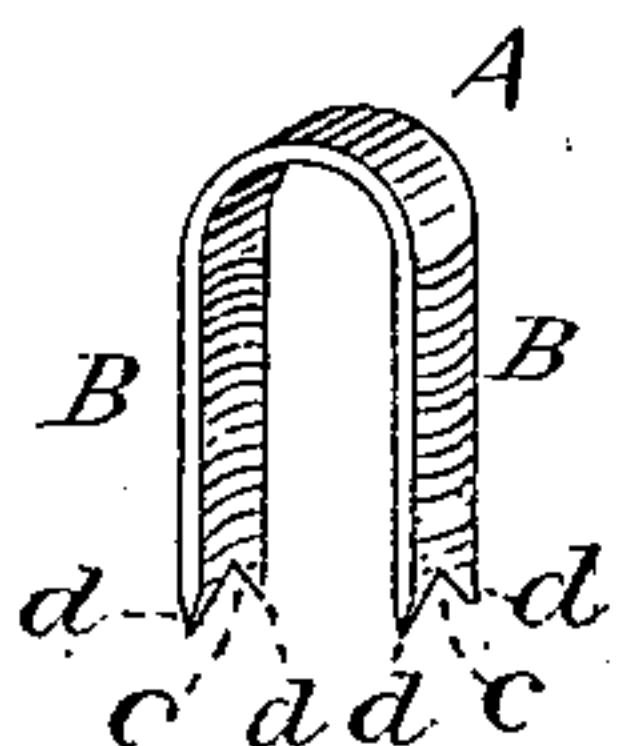


Fig. 3.

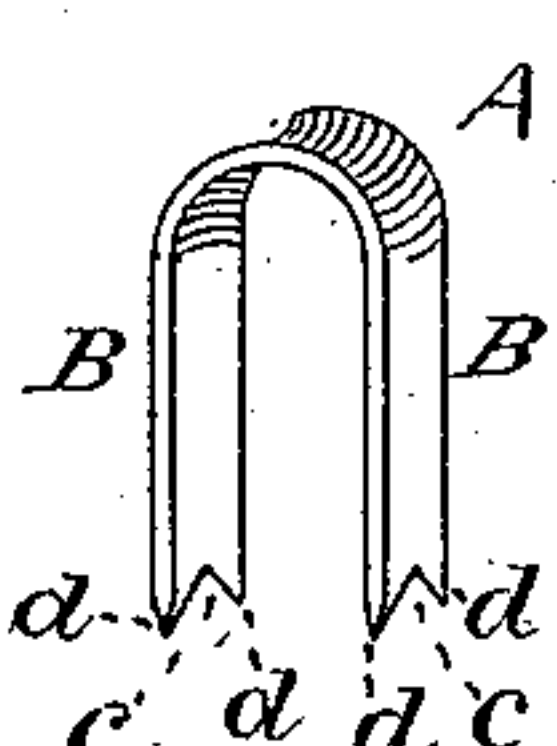


Fig. 4.

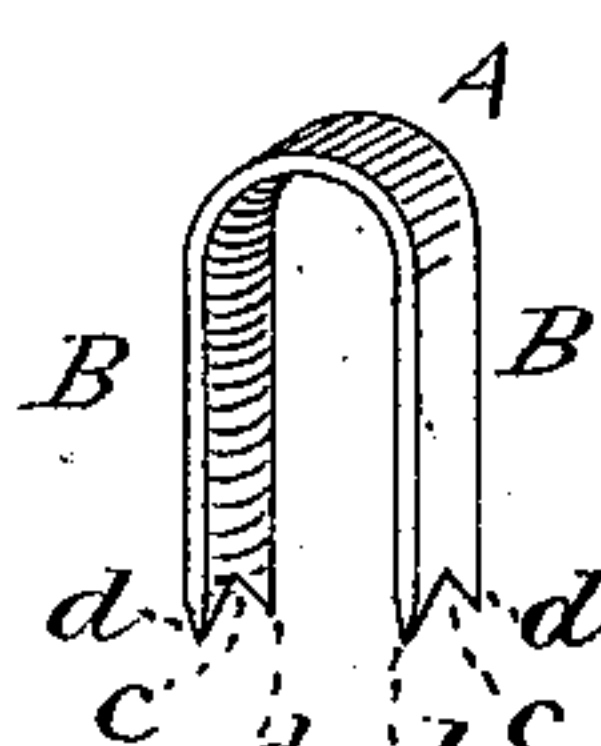


Fig. 5.

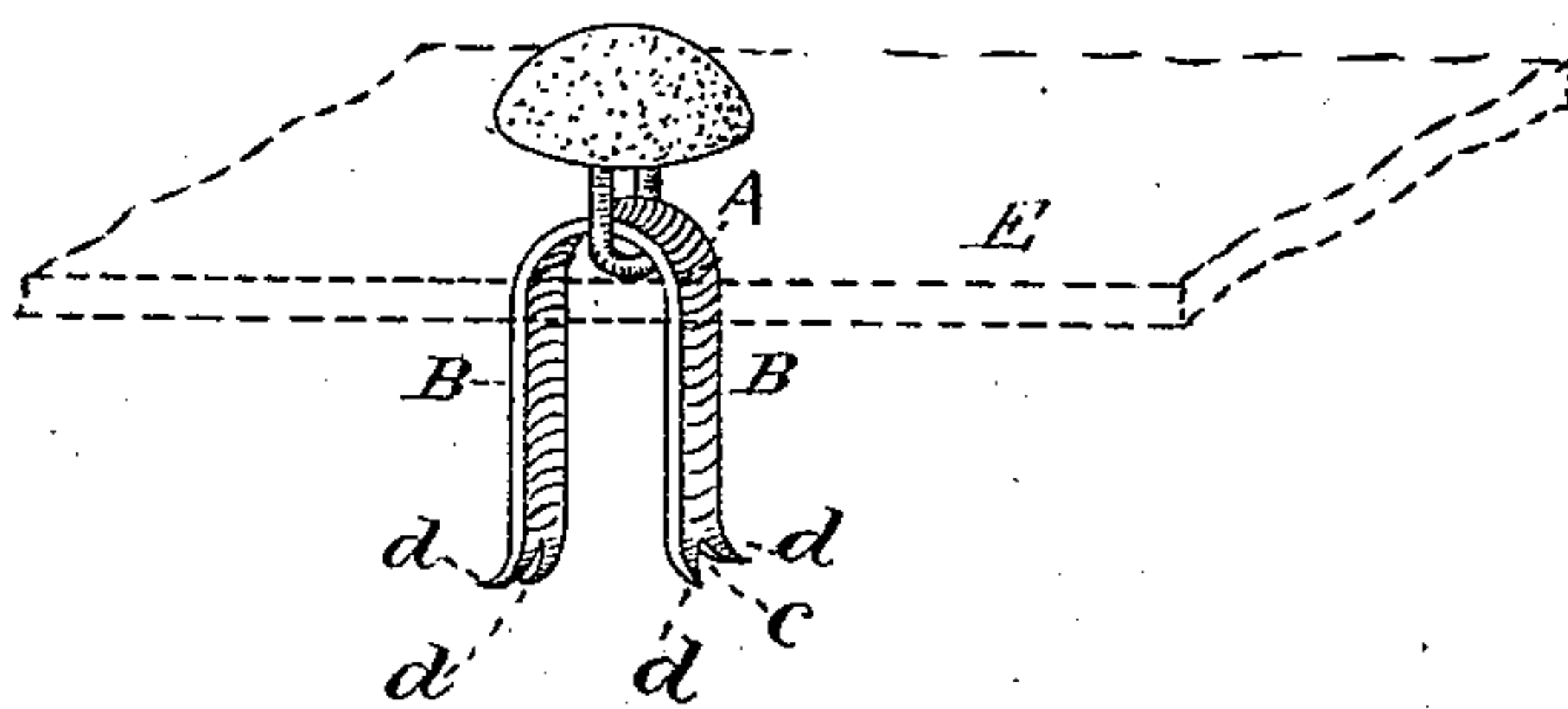
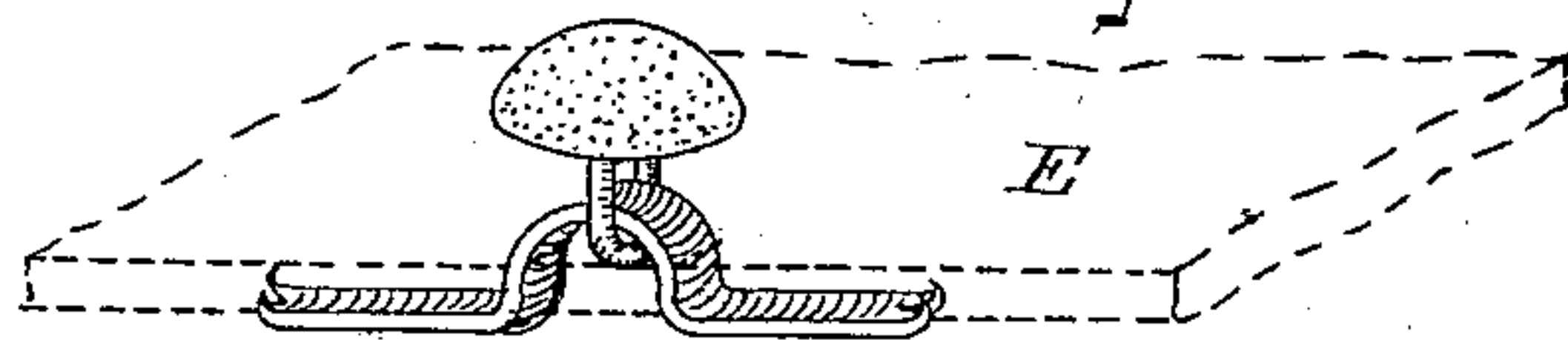


Fig. 6.



ATTEST:

J. A. Mudd
C. G. Perkins

INVENTOR:

Wm. M. Hazel

UNITED STATES PATENT OFFICE.

WILLIAM M. HAZEL, OF NEW YORK, N. Y.

BUTTON-FASTENING.

SPECIFICATION forming part of Letters Patent No. 272,836, dated February 20, 1883.

Application filed January 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, WM. M. HAZEL, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Button-Fastenings, of which the following is a specification.

My invention relates to certain new and useful improvements in an ordinary staple-fastening for attaching buttons to shoes and other apparel without an under plate in such a manner as to insure its ready penetration into fabric, the requisite close clinching of ends of same up into under side with the fabric between the two small prongs at each end of staple and down into the concave of large prongs, and the firm holding of same in the position in which it is finally set; and it consists essentially in a fastening constructed of sheet metal or flattened wire concavo-convex, with a loop to detain the eye of the button and two depending prongs, parallel to each other, made thinner at their ends, into which there are cut V-shaped notches, all of which will be more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, which are enlarged, Figure 1 represents my invention made concavo-convex, with loop and two depending prongs, in the ends of which are cut V shaped notches. Figs. 2, 3, and 4 represent modifications of my invention. Fig. 5 represents fastening with button attached after it is forced through fabric, and the V-shaped ends bent outward. Fig. 6 represents my fastening finally secured to button and fabric.

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

My fastening in its preferred form is made from sheet metal or flattened wire bent into the required shape, and then concaved on its upper or outer surface its entire length, with loop A and depending prongs B B. Said prongs, being parallel to each other, are made thinner at their ends, and provided with the V-shaped notches *c c*, forming the four small prongs *d d d d*, as shown in drawings, which may be pointed, as shown, or flat, at their ends, as preferred. The V-shaped notches *c c* are essential in either event. When the operator is in the act of pressing the prongs B B through the fabric the small prongs *d d d d*, by reason of their thin

V-shaped form on their inner edges, readily cut their way into the fabric and permit the prongs B B to follow them until their V-shaped ends come in contact with lower jaw of a machine, when said ends are inclined outward, as fully shown in Fig. 5 of drawings. The prongs B B are then pressed hard up against the under side of fabric in opposite directions, when the small prongs at the V-shaped ends of said prongs B B clinch closely and securely into the under side of the fabric, and apart from each other, with the fabric resting between said small prongs and down into the concavity of prongs B B, while that portion of the prongs B B where they turn out from the bottom of the loop up against the under side of the fabric when finally set, flatten and broaden at the portion below the loop A, on the under side of said fabric, and wedge the said loop into incisions made in the stock. It will be readily understood that in constructing the fastening concavo-convex thinner metal may be employed, as its strength and general efficiency will be largely increased after it is bent with prongs parallel to each other, as shown in the drawings, and also when finally secured to the fabric in the manner hereinbefore described it leaves but a very small rounded surface next to the person of the wearer, and rigidly secures the entire fastening.

This form of fastening is particularly desirable for attaching buttons to those shoes where the material is usually thin, and consequently defaced and injured by the ends of prongs appearing on outside of shoe, which often occurs with fastenings now in the market, that are forced through the fabric from the upper side by a machine and curled up and clinched.

Modified forms of my invention are shown in Figs. 2, 3, and 4. In Fig. 2 the prongs B B are made concavo-convex. In Fig. 3 the loop A is made concavo-convex, and in Fig. 4 the fastening is convex on its under side, each being provided with the V-shaped notches *c c*, forming small prongs *d d d d*, as shown in drawings.

Having fully described my invention and the manner of attaching same, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. An improved button-fastener, made from

flattened wire or sheet metal, presenting a concave upper or outer surface, and bent to form a central loop with two depending prongs, having notched end portions, substantially as shown and described.

2. An improved button-fastener, consisting of the loop A, depending prongs B B, concave on their upper or outer surface, made thinner at their ends, which are provided with small penetrating-prongs *d*, all substantially as shown, and for the purpose described.

3. A button-fastening made of wire, containing the loop A, depending prongs B B, V-shaped notches *c c*, and small prongs *d d d d*, substantially as and for the purpose set forth.

Signed at New York, in the county of New York and State of New York, this 8th day of January, A. D. 1883.

WM. M. HAZEL.

Witnesses:

B. J. KELLY,
S. C. DOY.