(No Model.)

M. D. SHIPMAN.

BUTTON.

No. 341,952. Patented May 18, 1886.

Fig. 1.

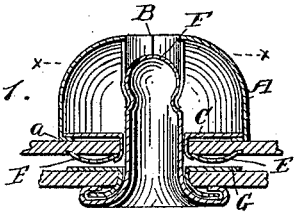


Fig. 2.

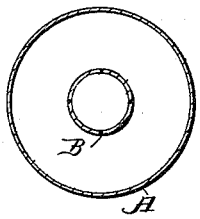


Fig. 3.

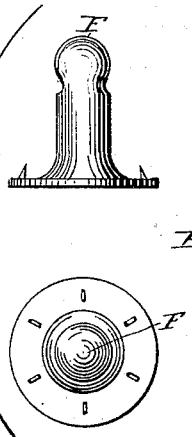


Fig. 4.

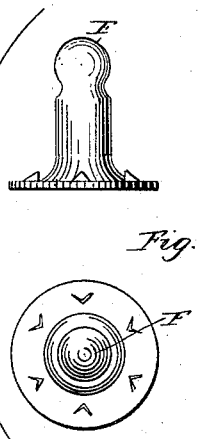


Fig. 5.

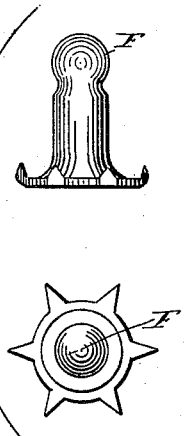


Fig. 6.

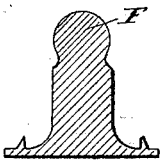


Fig. 7.

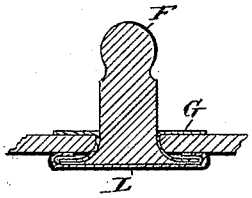
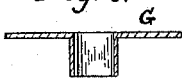


Fig. 8.



WITNESSES

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UNITED STATES PATENT OFFICE.

MADISON D. SHIPMAN, OF DE KALB, ILLINOIS.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 341,952, dated May 18, 1886.

Application filed January 27, 1885. Serial No. 154,151. (No model.)

To all whom it may concern:

Be it known that I, MADISON D. SHIPMAN, a citizen of the United States of America, residing at De Kalb, in the county of De Kalb and State of Illinois, have invented certain new and useful Improvements in Buttons, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates more particularly to that class of separable buttons in which there is a stud having an annular groove, which stud enters the head of the button and is there held by a spring or springs catching into said groove; and the invention consists in the peculiar arrangement and construction and combinations of parts, hereinafter more particularly described and claimed.

The accompanying drawings show my improvement on an enlarged scale the better to show the parts.

In said drawings, Figure 1 represents a vertical central section of my button in position for use. Fig. 2 is a horizontal section through the line X X in Fig. 1. Figs. 3, 4, and 5 are side views and plans of different forms of studs. Figs. 6 is a vertical section of a solid stud. Fig. 7 is a central vertical section showing the mode of uniting the stud to the material. Fig. 8 is a section of an eyelet used to fasten the button to the material.

A represents a cap for the head of the button, and B a tube, made in one piece with said cap, which tube is slit at right angles, as shown in Fig. 2, so as to form a series of fingers arranged in a circle whose lower ends are turned inward, as shown; or they may be made with an extension below, as shown in dotted lines, so as to leave their extreme ends outward, so as to present a flaring appearance below the turned-in portion. This cap is secured in place on the material D by a large-headed eyelet, C, such as is shown in Fig. 8, which is preferably secured to the head in the process of manufacturing the button by turning in the flange *a* under the head of the eyelet, as shown in Fig. 1.

When it is desired to secure the button to the material, the eyelet is passed through the material, a washer, E, is then put over the lower end of the eyelet, and the latter expanded and set down over the washer, as shown in Fig. 1, and thus the turned-under flange *a* of the head is securely held to the material by means of the eyelet and washer.

The stud F, to be used with the button, is provided with a series of spurs on its base, for a purpose hereinafter explained. These spurs may be made in various ways. In some cases they are made to project from the solid metal of the base, as shown in Fig. 3. In others they may be made by cutting triangular pieces from the base, but leaving one side of the triangle attached, as shown in Fig. 4; and in others they may be made by making the edge of the base of star form or with a series of projecting points, as shown in the plan view in Fig. 5, which points are afterward turned upward and inward, as shown in the side view of the same figure. Either of these studs, or any other form having projecting spurs of any form, may be united to the cloth by means of an eyelet, G, which, when forced down against the conical part of the base, will be turned outward and expanded under the spurs, and the latter, being at the same time closed down over the expanded part of the eyelet, will securely fasten the parts together. Besides their action on the expanded part of the eyelet, the points of the spurs will catch in the fibers or surface of the material, and thus securely hold the same; but independently of this action the material will be securely held between the head of the eyelet and the base of the stud.

Instead of making the stud, base, and the spurs all in one piece, as shown in Figs. 3, 4, and 5, the stud may have a base of comparatively small diameter, and a cap, L, (see Fig. 7,) with an overturned flange or rim formed on its periphery, and the whole may be united by pressing on the eyelet.

It is of course obvious that the studs may be made solid or hollow, as desired; but I prefer them made hollow, as shown in Fig. 1, and where I refer to studs in the following claim I mean to include solid as well as hollow studs.

I wish it to be understood that I do not limit myself to the exact construction shown or described, as it may be changed by the exercise of ordinary mechanical skill without the exercise of invention.

I make no claim in this application to the hollow cap and tube made in one piece, as this is claimed in my application No. 154,152, of even date herewith, nor to the enlargement near the base of the stud for the purpose of expanding the lower edge of the eyelet under the spurs, for the application above referred to shows and claims such an enlargement for turning the lower end of the eyelet under a flange, which I consider the equivalent of the spurs, when claimed in connection with said enlargement.

What I claim as new is—

In a button-fastening, the cap A, having a flange, *a*, and a slit tube, B, forming fingers to catch and hold a stud, said cap, tube, and flange being formed in one piece, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 24th day of January, 1885.

MADISON D. SHIPMAN.

Witnesses:
HERMAN K. HELMER,
SAMUEL E. BRADT.