(No Model.)

J. P. NOYES.

BUTTON.

No. 377,768. Patented Feb. 14, 1888.

Fig. 1.

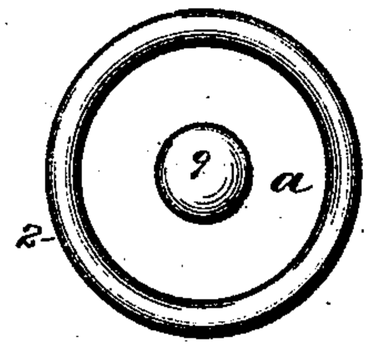


Fig. 2.

Fig. 3.

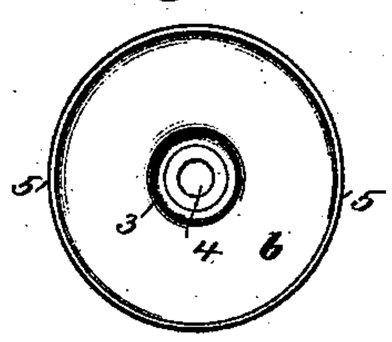


Fig. 4.

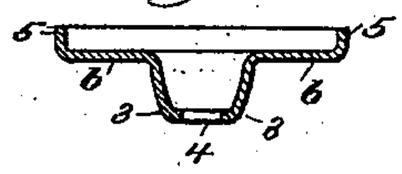


Fig. 7.

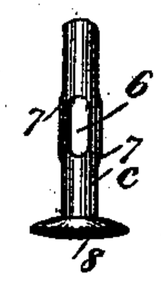


Fig. 10.

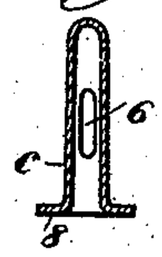


Fig. 5.

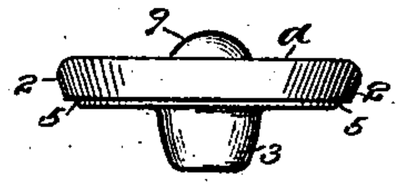


Fig. 6.

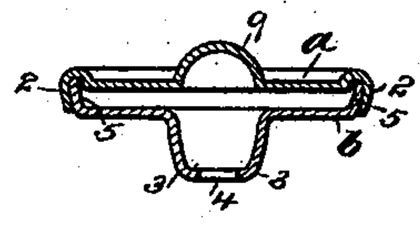


Fig. 11.

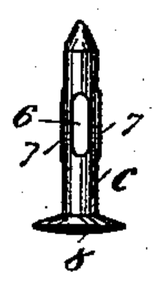


Fig. 8.

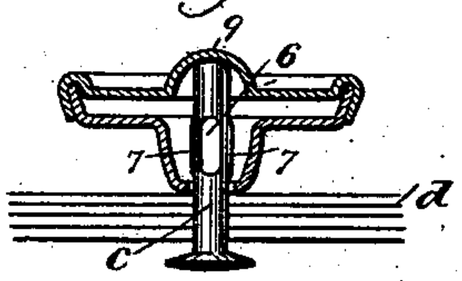
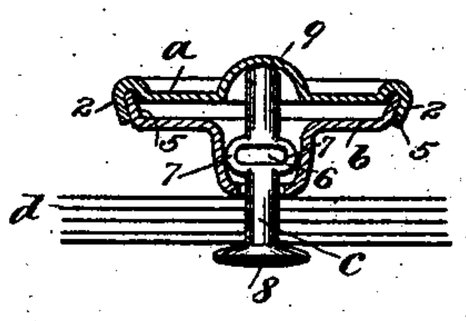


Fig. 9.



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by Philipp Philipp & Hovey
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UNITED STATES PATENT OFFICE.

JOSEPH P. NOYES, OF BINGHAMTON, NEW YORK, ASSIGNOR TO JOSEPH P. NOYES & CO., OF SAME PLACE.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 377,768, dated February 14, 1888.

Application filed October 7, 1887. Serial No. 251,726. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH P. NOYES, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Buttons, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to that general class of buttons which are fastened to the garment by means of a metallic pin or shank which passes through the fabric and enters the head or body of the button, as distinguished from those which are attached by means of thread which passes through the fabric and an eye or eyes in or on the button.

The present invention relates particularly to the construction of the metallic shank by which the button is fastened to the garment.

As a full understanding of the invention can be best given by an illustration and a detailed description of a button and its shank embodying the invention, all preliminary description of the invention will be omitted and a full description given, reference being had to the accompanying drawings, in which—

Figures 1 and 2 are respectively a top view and a section of the face-plate of the button. Figs. 3 and 4 are similar views of the back-plate. Figs. 5 and 6 are similar views of these two parts when assembled. Fig. 7 is a view of the fastening-shank. Fig. 8 is a sectional view showing the shank inserted and ready to be fastened. Fig. 9 is a similar view showing the shank fastened. Figs. 10 and 11 illustrate modifications, which will be hereinafter referred to.

Referring to said figures, it is to be understood that the button-body consists of two parts—a face-plate, *a*, having at its edge a flange, 2, for securing it to the back-plate, and a back-plate, *b*, provided at its edge with a similar flange, 5, to engage with the flange 2, and at its center with a cup-shaped depression, 3, having a central opening, 4, to receive the fastening-shank.

The construction which has been described is exceedingly simple and is the preferred form; but the form of and the manner of uniting the face and back plates may be widely varied, or the face-plate omitted altogether, without departing from the invention. If desired, the button-body may be covered with fabric and may be ornamented in any suitable manner.

The fastening-shank *c* consists of a metal pin having a solid point and a suitable head, 8, to retain it in the fabric, and provided between its head and point with an opening, 6. The shank *c* is made of some composition or metal—such as copper—which can be easily bent, and the opening 6 may be of the oval form shown, or may be of polygonal form, or may be a simple slit. In any case, however, it will preferably be elongated in the direction of the length of the shank, but will not extend to the point of the shank. The shank may be made of solid wire, as shown in Figs. 7, 8, 9, and 11, or may be drawn hollow from sheet metal, as shown in Fig. 10.

The manner of applying the button thus constructed is as follows: The shank *c* is passed through the fabric *d* and inserted through the opening 4 into the button-body, as shown in Fig. 8. A suitable tool—such as a properly-shaped pair of pliers or a die in a machine—will then be applied so as to force the end of the shank against the face-plate. This will cause the weaker portions 7 of the metal at the sides of the opening 6 to spread and form a double T, as shown in Fig. 9, which will engage with the back-plate *b* and prevent the shank from being withdrawn through the opening 4. The T formed upon the inner portion of the shank when the portions 7 of the metal are spread serves as a brace to the T formed upon the outer portion of the shank, so that the double T is very strong, and thus the shank is very firmly held in the button-body, so that the latter cannot be detached from the fabric by any strain to which it is likely to be subjected.

The dome-shaped portion 9 of the face-plate will receive the end of the shank and serve to center and hold the shank during the operation of spreading the portions 7. To center the shank still more accurately, it may be desirable, in some cases, to make the end of the shank conical and the dome portion 9 of just sufficient size to receive the end of the shank, as shown in Fig. 11.

I am aware of the United States Letters Pat-

ent No. 337,142, granted to Elisha Flagg, in which there is shown and described a fastening-shank for buttons having a longitudinal slit extending from the point of the shank to near its head, and this construction I do not claim.

What I claim is—

1. The fastening-shank for buttons, consisting of a metallic pin having a head at one end and a solid point, and an opening between its head and point, substantially as described.

2. The fastening-shank for buttons, consisting of a metallic pin having a head at one end and a solid point, and an elongated opening between its head and point, substantially as described.

3. The combination, with the button-body, of the fastening-shank *c*, having the head 8 at one end, a solid point, and an opening, 6, between its head and point, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSEPH P. NOYES.

Witnesses:

THOMAS J. WINANS,

NEWTON C. SMITH.