## S. COTTLE. Button.

No. 202,412.

Patented April 16, 1878.

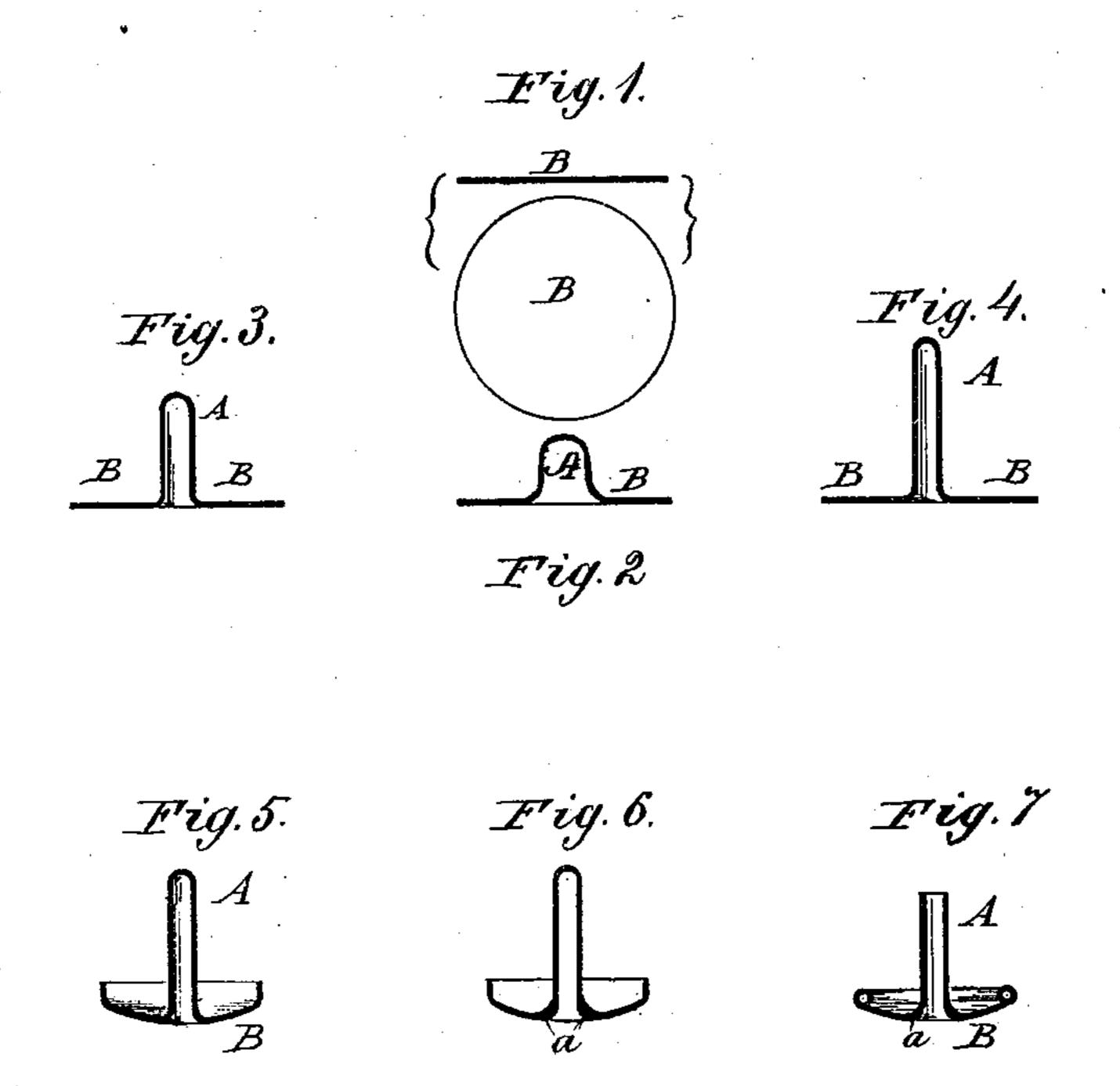


Fig. 8.

WITNESSES

6. Sedgwick

INVENTOR

BA

**Α ΤΠΌΣ ΜΕΎ** 

## UNITED STATES PATENT OFFICE.

SHUBAEL COTTLE, OF NEW YORK, N. Y.

## IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. 202,412, dated April 16, 1878; application filed March 16, 1878.

To all whom it may concern:

Be it known that I, Shubael Cottle, of the city, county, and State of New York, have invented an Improvement in the Construction of Collar and Sleeve Buttons, of which the

following is a specification:

The common practice is to make the head, back, and post of collar and sleeve buttons separate, and to unite them by solder. In such case the post has a seam lengthwise thereof, formed by lapping the edges of the plate from which it is constructed. Skilled labor is required for applying the solder for the purpose of uniting the head and back to the post; but the solder is liable to run along the previouslysoldered seam of the post, or else to fail to spread evenly over or around the end of the latter. The result is that the back and (more particularly) the head of the button are frequently united to the post so imperfectly that they soon become detached after the button has been put in use.

In order to form a stronger and more durable (and also cheaper) button, I propose to construct the post in one piece with the back by striking up and drawing out the central portion of the latter to the required length, then severing the end of the post and soldering the head thereto. The post having no seam, the solder will not tend to attach itself to the side of the latter, and will firmly unite the parts. At one stage of the process I upset the hollow post and the disk from which it is formed in such a manner as to increase the thickness of the metal at the base of the post, thereby

strengthening the latter.

In the accompanying drawing, Figure 1 represents an edge and plan view of the gold disk from which the back and post of the button are formed. Figs. 2 to 7, inclusive, are sections of the back and post of the button, serving to illustrate the process of formation. Fig. 8 is a section of the complete button.

In forming the button, a gold disk, Fig. 1, is operated on successively by means of a series of suitably-constructed dies, (not shown,) to

gradually form a hollow post, A, Figs. 2 to 5, inclusive, by raising and drawing out the central portion of the disk, as will be readily understood without particular description.

When the disk and post have received the form shown in Fig. 5, I upset them by means of dies specially adapted for the purpose, whereby the metal is thickened at the base a of the post A. as shown in Fig. 6. By this construction the post is greatly strengthened, and the button rendered more durable and serviceable in use. The top of the post is then severed or cut off, as shown in Fig. 7, and the head C soldered thereto, Fig. 8. The solder will adhere equally at all points around the end of the post, and thus firmly unite the head thereto.

In forming the post from the disk skilled labor is not required, since the several operations are effected by mechanical devices. Less gold is also required to form the button than when the post is made separate from the back, and hence an economy is effected in the manufacture of the button.

I am aware that in the construction of studfastenings for corsets a post has been formed by elongating or drawing out the central portion of a rectangular plate. I do not, therefore, claim this process.

What I claim is—

1. The improved process of constructing a collar or sleeve button herein described—to wit, striking up and drawing out the central portion of a circular metal disk to form the hollow post A, then severing the conical end of said post, and soldering the head C to the body of the same, as shown and described.

2. The collar or sleeve button whose tubular post A and back B are formed in one piece, and having the metal thickened at the base a of the post, as shown and described, for the

purpose specified.

SHUBAEL COTTLE.

Witnesses:

JAMES T. GRAHAM, C. SEDGWICK.