

(No Model.)

E. H. ROYCE, F. W. ALLEN & M. H. FULLER.
BUTTON.

No. 256,056.

Patented Apr. 4, 1882.

Fig. 1.

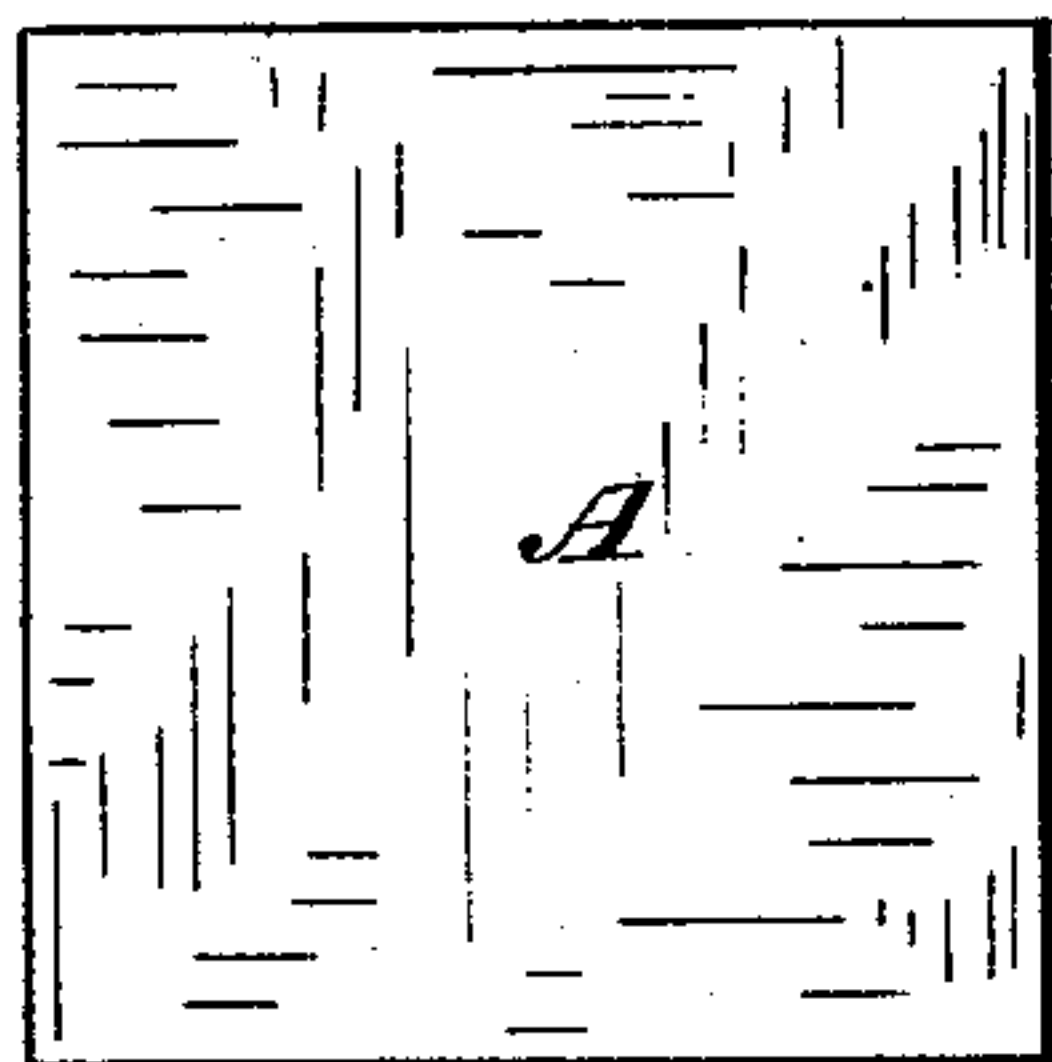


Fig. 2.

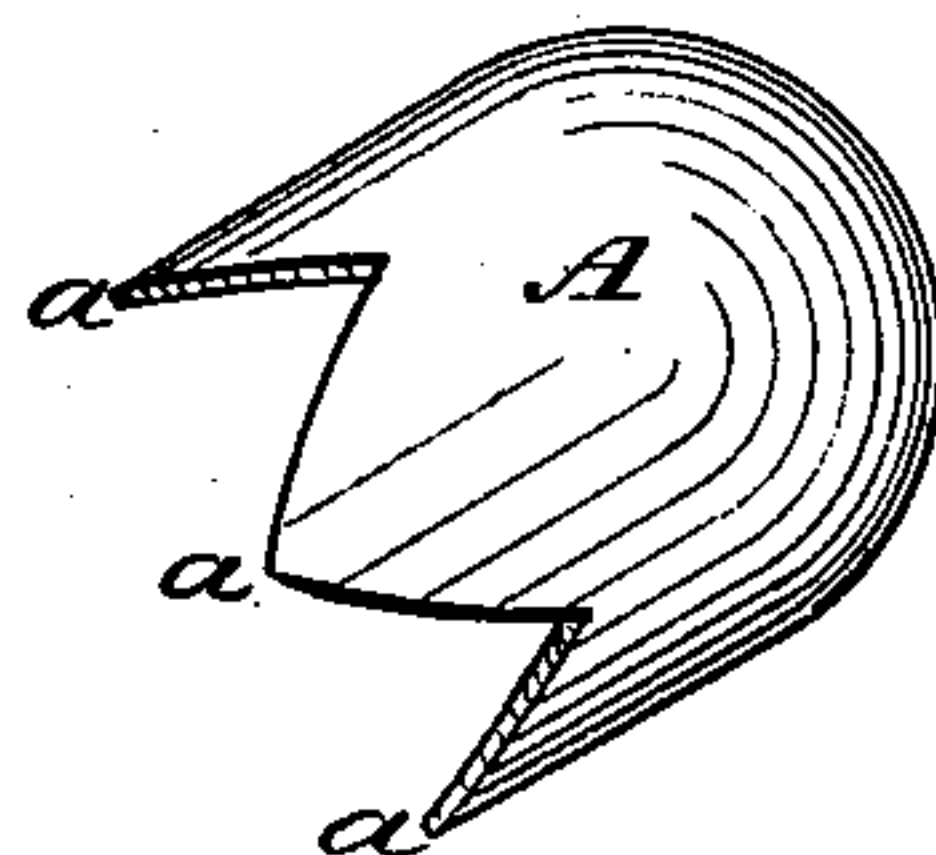


Fig. 3.

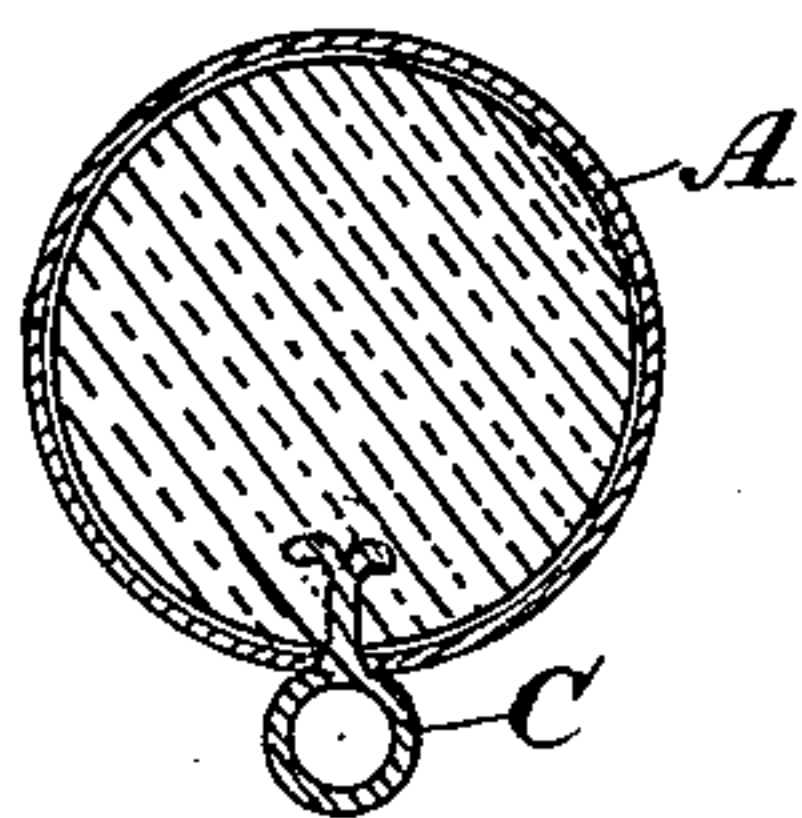


Fig. 4.

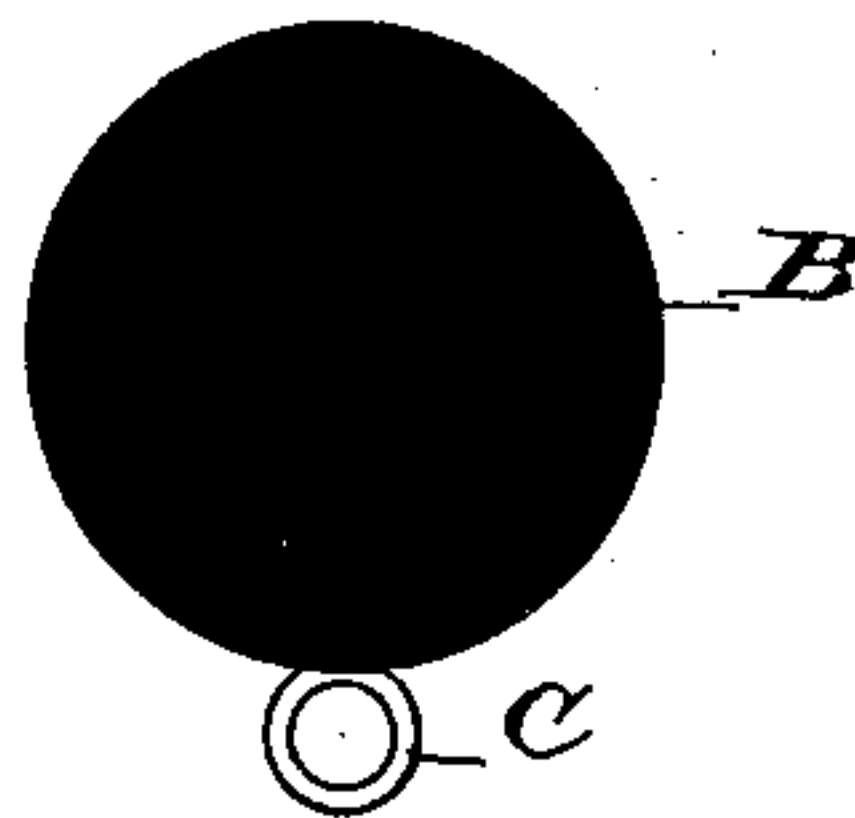
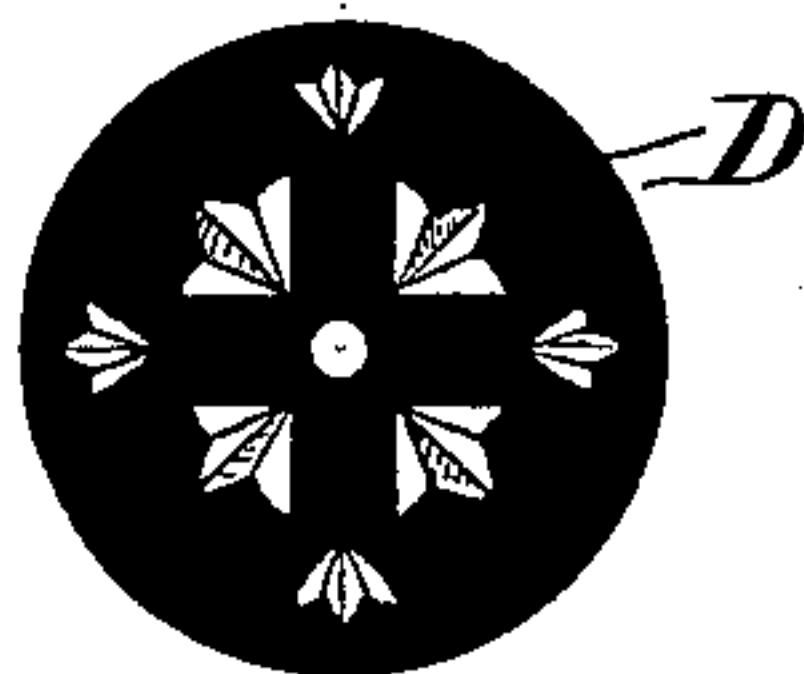


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD H. ROYCE, FREDERICK W. ALLEN, AND MYRON H. FULLER, OF
PROVIDENCE, RHODE ISLAND.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 256,056, dated April 4, 1882.

Application filed February 28, 1882. (No model.)

To all whom it may concern:

Be it known that we, EDWARD H. ROYCE, FREDERICK W. ALLEN, and MYRON H. FULLER, citizens of the United States, residing at Providence, Rhode Island, have invented new and useful Improvements in Buttons, of which the following is a specification.

Our invention relates to certain new and useful improvements in the art of manufacturing ladies' dress-buttons from sheet metal.

It has for its objects the production of a pleasing and permanent design; and it consists in first forming the button of white-metal in any well-known manner, then coating its exterior surface with any desirable composition; and subsequently producing the design by cutting through the exterior coating and slightly into the white-metal body beneath, producing not only an intaglio design by contrast between the white-metal and its composition coating, but giving a reflecting brilliancy by reason of the polished condition of the white-metal resulting from the cutting of the same.

In order that our invention may be fully comprehended by those skilled in the art, we will describe the same more in detail, referring by letters to the accompanying drawings, in which—

Figure 1 is a plan view of a white-metal blank from which we form the body of the button. Fig. 2 is a perspective view of the same after the first action upon it between drawing-dies. Fig. 3 is a central section after the corners of the blank have been closed against or around the shank of the button. Fig. 4 is a side elevation, and the solid black is intended to represent the metal completely coated with a suitable contrasting composition; and Fig. 5, a top view illustrating the design produced by cutting away the composition and slightly removing the surface of the white-metal foundation or body.

In the several figures of the drawings we have shown the most desirable method of forming the button from an ordinary square blank of white-metal; but we do not, of course, wish to be limited in this respect, as our invention relates particularly to the subsequent treatment of the formed button to produce the design.

A represents a square blank of white-metal, which is drawn into the shape shown at Fig. 2 between suitable drawing-dies, care being taken to draw the corners toward each other over the diagonals.

B represents a composition of any suitable contrasting color, which is applied to the exterior surface of the button.

C is an ordinary shank, and D the design. The shank C is made of any suitable material, and is confined in place between the adjacent corners or points *a a*, &c., of the blank, and, if desirable, a drop of solder may be employed to more firmly unite the corners and the shank. After the white-metal blank has been brought into the form of a button its exterior surface is coated with a suitably-colored composition, B, as shown at Fig. 4, and then the design shown in white at Fig. 5, and indicated by letter D, is produced, as before stated, by removing a portion of the design down to the metal beneath and slightly cutting away the latter to give a polished or reflecting effect. We do not wish, however, to confine ourselves to the actual removal of any portion of the white-metal foundation, as it will be obvious that the contrast between the composition and the natural color of the metal will bring the design into prominence. We however prefer to slightly cut the white-metal, for the purpose already stated.

The composition remaining between and surrounding the several figures composing a design—or if a single figure is used, then the composition surrounding it—will serve to guard and protect the design, as the composition occupies a plane necessarily higher than the design.

We have in the drawings shown the body of the button of a spherical form; but we may, if desirable, make it in any other form, or we may produce the design upon surface of a simple flat button; and we wish it to be understood that we do not confine ourselves to coating the entire surface of the button, as only so much may be coated as may be necessary to produce the design by contrast, in the manner already described.

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

1. As an improvement in the art of making buttons from sheet metal, first coating the formed button with a layer of contrasting composition, and then producing a design composed of characters or figures by the removal of a portion of composition to expose the metal underneath, leaving the design surrounded and protected and producing immediate contrast, substantially as hereinbefore set forth.
2. As an improvement in the art of making sheet-metal buttons, first coating the formed button with a layer of contrasting composition, and then ornamenting the same by cutting away a portion of the composition and slightly into the metal underneath, substantially as and for the purposes hereinbefore set forth.

3. As a new article of manufacture, a sheet-metal button coated with a layer of composition of contrasting color, a portion of the composition and of the underlying metal being removed to form a design, substantially as hereinbefore set forth.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

EDWARD H. ROYCE.
FREDERICK W. ALLEN.
MYRON H. FULLER.

Witnesses:

FRED R. MARTIN,
G. F. ALBRO.