

(Model.)

E. N. FOOTE.
METALLIC BUTTON.

No. 274,582.

Patented Mar. 27, 1883.

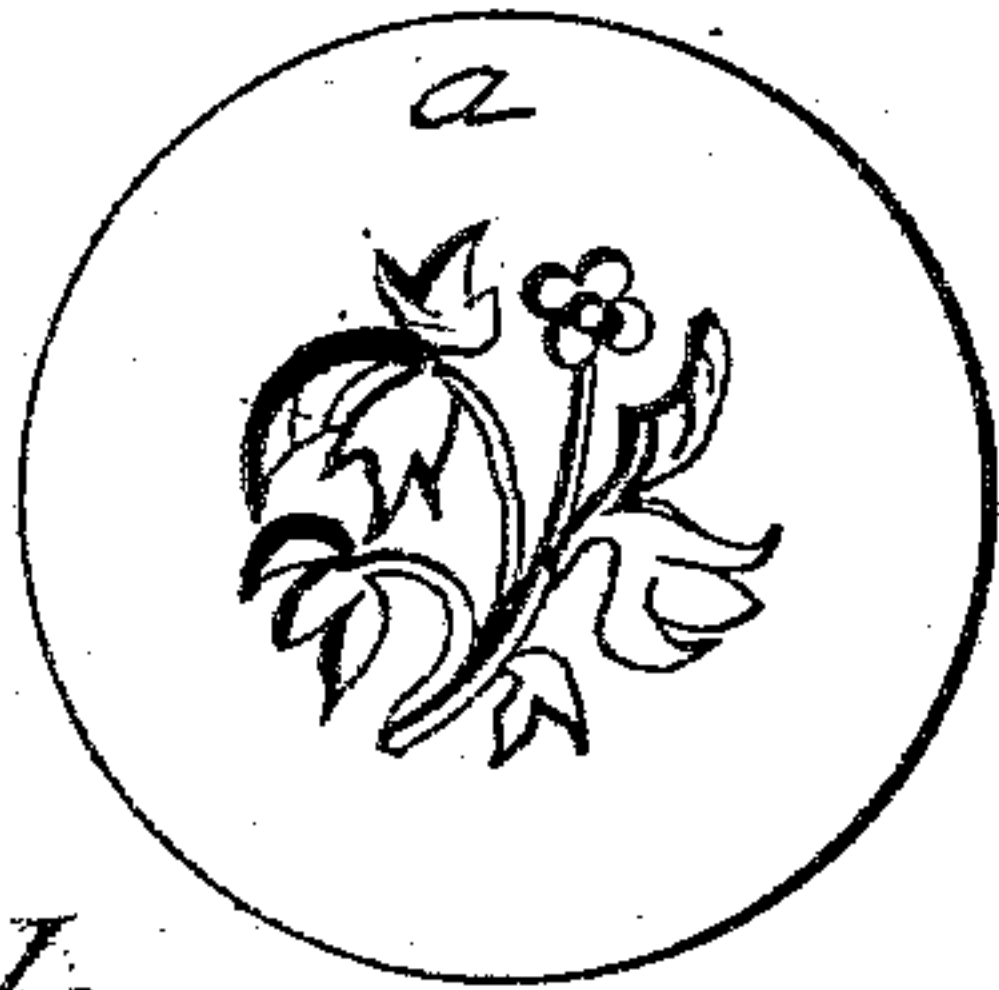


Fig. I.

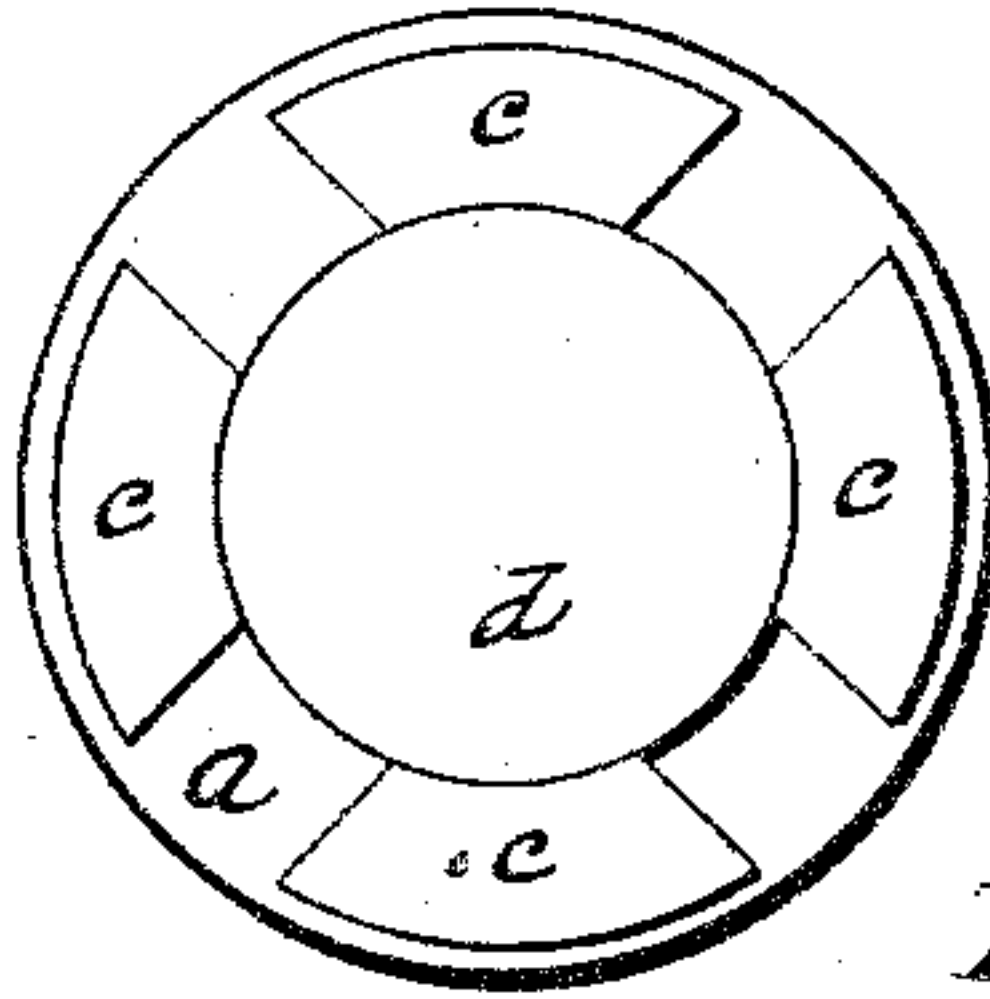


Fig. II.

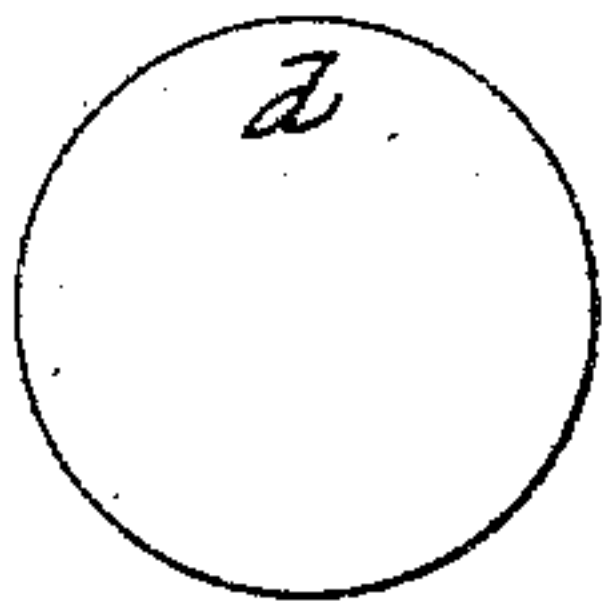


Fig. VI.



Fig. VII.

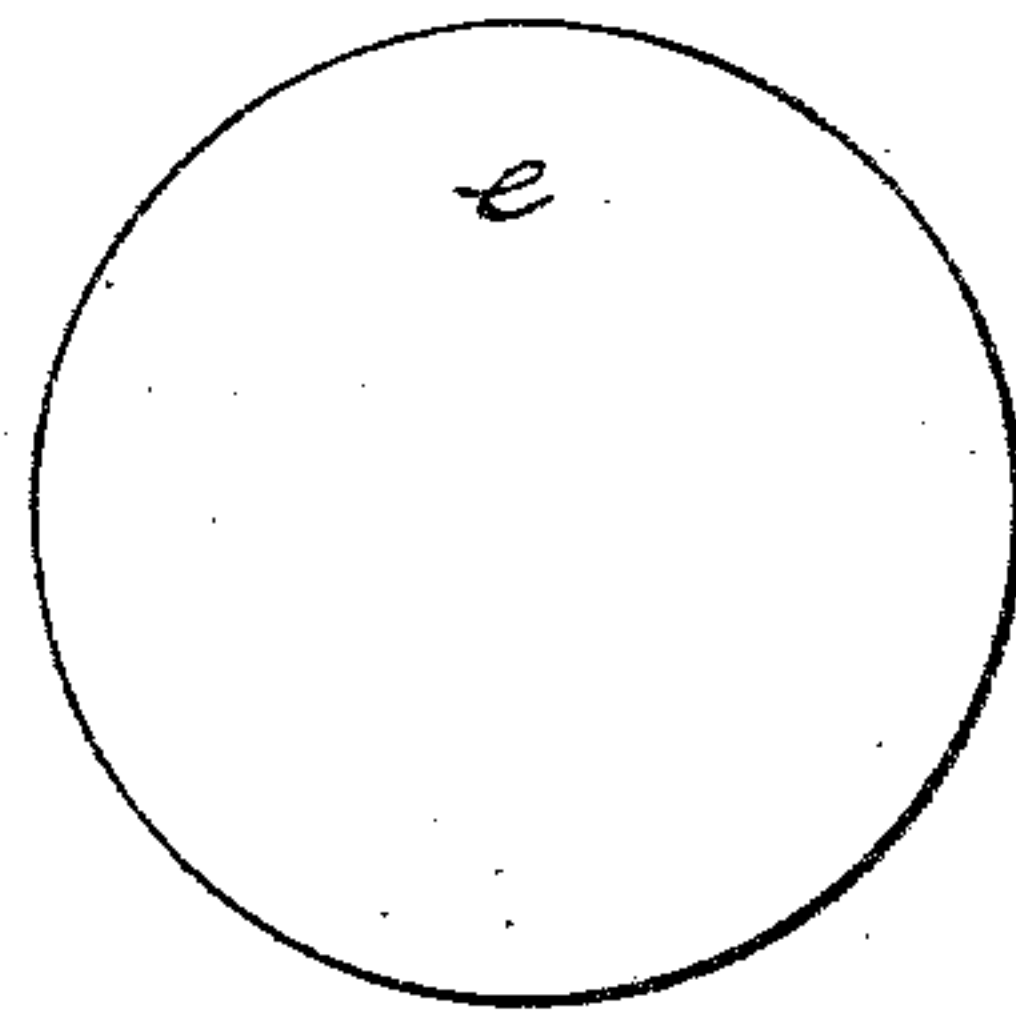


Fig. III.

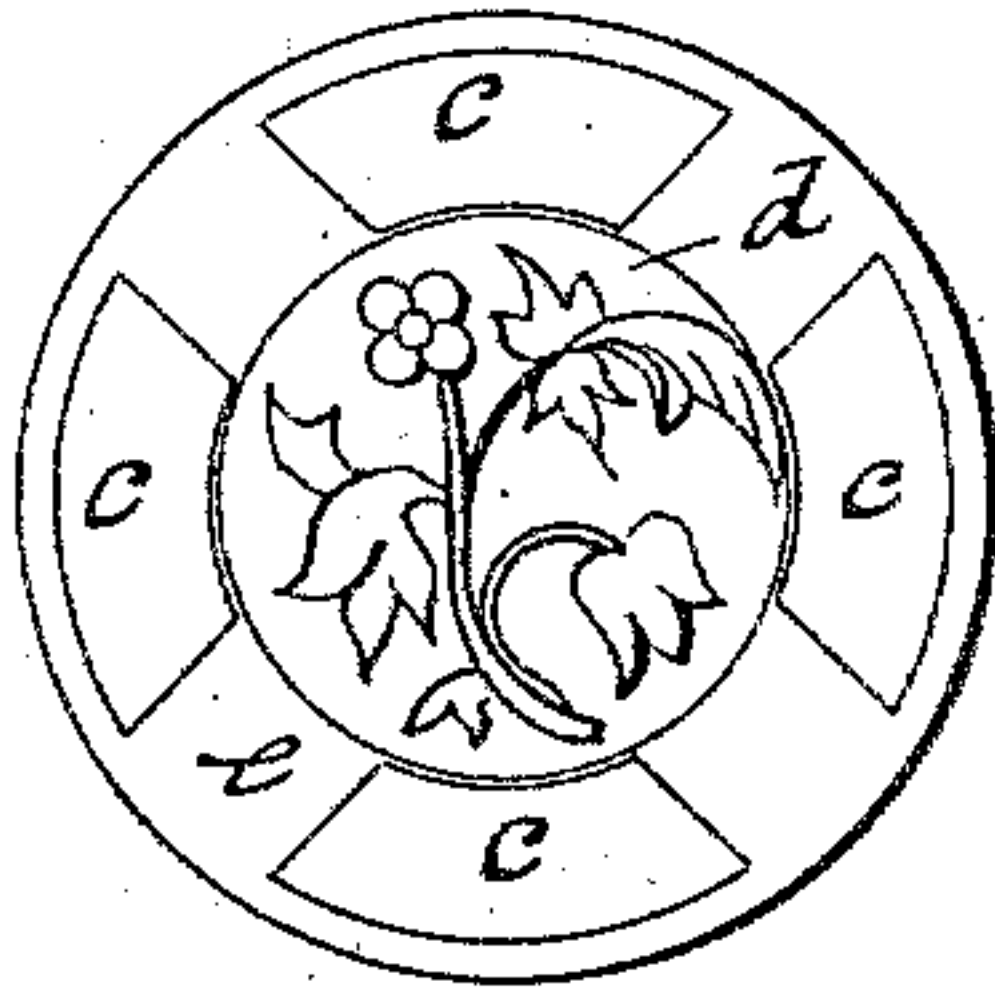


Fig. IV.



Fig. V.

Witnessed,
P. F. Hyde
Wm. A. Chapin

Inventor,
Edward N. Foote
by Henry A. Chapin
att'y

UNITED STATES PATENT OFFICE.

EDWARD N. FOOTE, OF NORTHAMPTON, MASSACHUSETTS.

METALLIC BUTTON.

SPECIFICATION forming part of Letters Patent No. 274,582, dated March 27, 1883.

Application filed December 11, 1882. (Model.)

To all whom it may concern:

Be it known that I, EDWARD N. FOOTE, a citizen of the United States, residing at Northampton, in the county of Hampshire and State of Massachusetts, have invented new and useful Improvements in Metallic Buttons, of which the following is a specification.

This invention relates to an improved metallic button, and to the method of manufacturing the same, the object being to produce, in a rapid and economical manner, a button having a face composed of several different metals, having thereupon raised and depressed ornamental figures and a pleasing contrast of colors, which is produced by the employment of vari-colored metals in the production of said button.

In the drawings forming part of this specification, Figure 4 illustrates the face of a button embodying my invention. Fig. 5 is a transverse section. Fig. 1 illustrates the face of a die used in the manufacture of said button. Fig. 3 illustrates a button-blank, and Figs. 6 and 7 metallic surface-pieces. Fig. 2 illustrates the manner of arranging the pieces shown in Figs. 6 and 7 upon the face of the die preparatory to uniting them with the piece shown in Fig. 3.

In carrying out my invention in the manufacture of buttons, I prepare a die, *a*, upon which I form any suitable ornamental figure, substantially as shown, and adapt it to be operated in any suitable press, with a plain-faced forcing or base block. I next prepare suitable metallic pieces, as illustrated in Figs. 3, 6, and 7, *e* being a disk of a soft quality of metal and of suitable thickness and diameter for a button. The metal used for the piece *e* may be such as is usually called "white-metal," and composed mainly of tin and lead, or the latter and bismuth or zinc. The piece *d* is made of brass or other suitable metal, and is adapted to about cover the figure on the die *a*. The segment-shaped pieces *c* are made from sheet-brass, (as is said piece *d*,) and are of proper form to be placed around the piece *d*, as shown in Fig. 2, upon the die *a*. Said parts having been prepared, as above described, they are united to produce a button face and body, as shown in Figs. 5 and 6, in the following man-

ner: The disk *d* is laid upon the central figured portion of the die *a*, and the pieces *c* are laid on the latter, all in about the positions shown in Fig. 2, *a* being the bottom die in the press. The button-blank *e* (of white or soft metal) is then laid onto the said pieces *d* *c* *c*, and the upper die is then made to strike on said blank with such power as to cause said disk *d* and the soft metal beneath it to receive a clear reverse impression of the figure on said die, and to cause said disk and blank to be thereby firmly united one to the other, taking a configuration substantially such as is shown in Fig. 5. At the same time that the pieces *e* and *d* are forced together, as aforesaid, the pieces *c* are forced into the surface of the blank *e*, occupying such a position relative to the latter as is shown in Fig. 5. After said parts *e*, *d*, and *c* have been forcibly united, as above stated, a suitable shank is attached to the rear side of the piece *e*, and the face thereof not covered by said parts is then ornamented in any suitable manner, by engraving or otherwise, and the exposed faces of the parts *c* are likewise engraved or chased, and any suitable ground-color is added to bring out more advantageously the effect of the raised figure on said piece *d*, whereby the button is completed.

Attractive ornamental effects in buttons may be produced by omitting the pieces *c* and engraving or otherwise finishing the surface of the button surrounding the center piece, *d*, or by inserting the said pieces *c*, as aforesaid, in said surface and then engraving the central portion of the button, or applying a suitable contrasting color thereto.

It will be seen that by the above-described method of producing said button a face is obtained in which are mingled the yellow color of the brass and its bright engraven effect, the white shining effect of the engraved white-metal, and said ground-color applied to portions of the white-metal.

It is obvious that the above-described method of employing metals of different degrees of hardness and of different colors in the manufacture of buttons may be advantageously employed in making many other analogous articles of wearing-apparel and of ornamentation.

What I claim as my invention is—

The within-described improved process for constructing a metallic button, which consists in preparing a disk, *e*, of soft metal, and several surface-pieces, substantially as described, of harder metal, placing said hard and soft metallic pieces between forcing-dies and em-

bedding said harder pieces within the said disk, and in subsequently ornamenting the surface of said pieces, substantially as described. 10
EDWARD N. FOOTE.

Witnesses:

R. F. HYDE,
WM. H. CHAPIN.