(No Model.)

O. BARTHELS

ORNAMENTING BUTTONS.

No. 262,347. Patented Aug. 8, 1882.

Fig. 1.

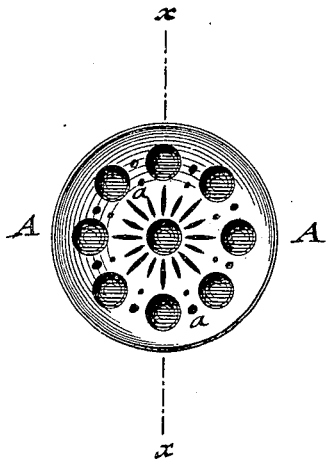


Fig. 2.

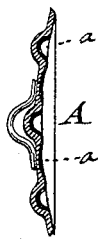
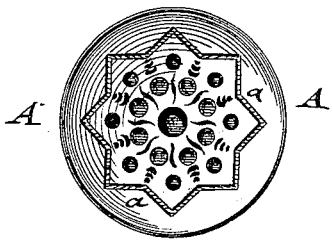


Fig. 3.



WITNESSES:

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ORNAMENTING BUTTONS.

SPECIFICATION forming part of Letters Patent No. 262,347, dated August 8, 1882.

Application filed March 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, OTTO BARTHELS, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in the Ornamentation of Metallic Buttons, of which the following is a specification.

My invention relates to that class of buttons which are made of metal and are constructed with concave surfaces.

The nature of the invention consists in the application of gold or other metal leaf to the said concave surfaces by pressure, so that it will be held by atmospheric pressure, protected by the surrounding edge of the concave metal, and form at the same time an ornamental design sunk into said concave surface of said metal.

The object of the invention is to provide for consumers a cheaper and beautiful button, fully equal in appearance and usefulness to the most expensive buttons engraved by hand.

Figures 1 and 3 represent front views of said button. Fig. 2 is a vertical transverse section of said button on the line *x x* of Fig. 1.

The button, which is represented by A, is made of metal, of any convenient concave form, preferably a spherical segment, as shown in section in Fig. 2. In the large concave surface, if it be desirable, may be constructed or stamped other smaller concave depressions of shorter diameter, as shown in section in Fig. 2. Into these concave surfaces of the button is pressed or stamped, with a cold stamp, by hand or machine any convenient ornamental design, *a*. Some parts of this design may be of greater and some of less depth, as the nature of the design may seem to require; but before said design is pressed or stamped, as aforesaid, gold leaf or other metallic leaf is loosely laid on said concave surface so to be impressed, so that at the same time that the stamp forms the design it forces said metallic leaf into the depressions of which the design consists, pressing it so hard against the bottom of said depressions that the atmosphere is excluded from between the said bottom surfaces of said depressions and the said metal leaf, causing said metallic leaf to adhere to the said bottoms of said depressions by atmospheric pressure. This adherence would not be enough to keep said portions of metallic leaf permanently in said depressions if said design were not protected. For this purpose the button is made concave, so that the raised edge on the exterior of the concave surfaces will form a protecting-guard, which prevents anything from rubbing on said design and abrading the metal leaf, thus forming a very cheap, useful, and beautiful button.

I am aware that book-binders, pocket-book makers, and many other artisans ornament their work by pressing gold and other metal leaf into the ornamental designs. They use, first, a hot stamp; second, the metal leaf is laid on a surface prepared with glair of egg, glue sizing, or some other similar material; third, the metal is laid on a soft surface, such as leather, cloth, or paper; and, fourth, the heat of the stamp melting the size, and, further, softening the surface, the metal leaf is, as it were, melted or burned in by the action of the hot stamp, and held in its place by the adhesive nature of the size with which the surface was first prepared.

For my purpose I use, first, a cold stamp; second, the metal leaf is stamped or pressed into a surface of comparatively hard metal; third, I use no glutinous substance whatever, depending entirely upon atmospheric pressure to hold the metal leaf in its place; and, fourth, the design is always stamped on a concave surface, so that the surrounding edge will protect the design from abrasion.

This same process may be advantageously used for ornamenting many other small concave metallic surfaces, such as cheap jewelry and the like.

I claim—

1. That improvement in the art of ornamenting metallic surfaces which consists in laying upon the part to be ornamented a sheet of metallic leaf, then forcing the same into concaved figures by a tool which shall form such figures and attach therein portions of the metallic leaf at one and the same operation, substantially as set forth.

2. As an improved manufacture, a button having its face surface ornamented with concaved figures containing a lining of metallic leaf held therein by atmospheric pressure, all substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

OTTO BARTHELS.

Witnesses:
PAUL GOEPEL,
SIDNEY MANN.