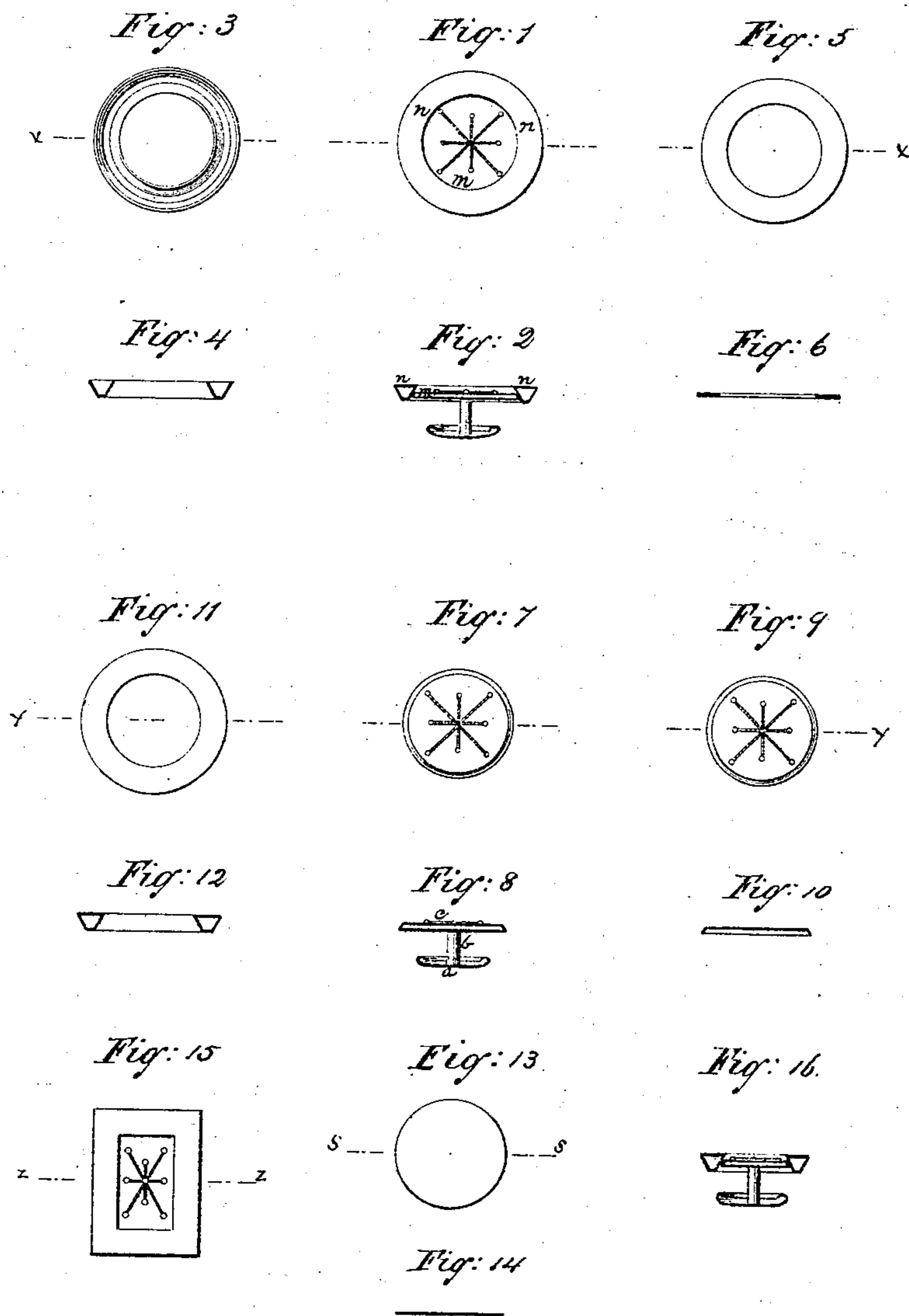


L. S. BEALS.  
Sleeve-Buttons.

No. 153,525.

Patented July 28, 1874.



Witnesses:

Robt. H. Duncan.  
Benj. A. Smith

Inventor:

Leonard S. Beals

# UNITED STATES PATENT OFFICE.

LEONARD S. BEALS, OF ASTORIA, NEW YORK.

## IMPROVEMENT IN SLEEVE-BUTTONS.

Specification forming part of Letters Patent No. **153,525**, dated July 28, 1874; application filed March 6, 1874.

*To all whom it may concern:*

Be it known that I, LEONARD S. BEALS, of Astoria, in the State of New York, have invented a new and useful mode of Manufacturing Sleeve-Buttons, Studs, and kindred articles, of which the following is a specification:

This invention relates to a new and improved mode of manufacturing sleeve-buttons, studs, and kindred articles, which are formed from parts struck up from sheet metal; and the principal feature of the invention consists in surrounding the head of an ordinary plated button with a rim or border raised above the head of the button, and constructed substantially in the manner and for the purposes hereinafter indicated.

In the accompanying drawings, Figures 1 and 2 represent plan and sectional views of the completed button or stud, in which *m* is the central portion, and *n n* the rim or border. Figs. 3 and 4 are plan and sectional views of the under or convex surface of the rim or border, Fig. 4, showing section of the concavity of same. Figs. 5 and 6 are plan and sectional views of the upper part of the rim or border. Figs. 7 and 8 are plan and sectional views of the central portion of the button or stud, in which *a* is the shoe, *b* the post, and *c* the head. Figs. 9 and 10 are plan and sectional views of the upper plate of the central portion of the button. Figs. 11 and 12 are plan and sectional views of the completed rim or border. Figs. 13 and 14 are plan and sectional views of the under part of the head of the central portion, when such head is made of two parts. Figs. 15 and 16 are plan and sectional views of the button when the contour of its upper portion is rectangular.

The central portion of the button or stud may be made in the usual manner; and consists of the shoe *a*, the post *b*, and the head *c*, as represented in Fig. 8 of the drawings. The head, whenever it is desired to have both the upper and under surfaces thereof plated, is composed of an upper and under sheet or plate of metal, the upper plate having a narrow beveled flange turned downward and outward, to the lower edge of which flange the periphery of the lower plate is united, thus forming a hollow disk, which constitutes the central portion of the head of the button. These

parts are shown in Figs. 9 and 10, 13 and 14, of the drawings. This head, instead of being hollow, may be filled with lead, solder, or other like substance, either before or at the time of uniting the upper and under plates. When, however, it is desired to have only the upper face of the central portion of the head of the button plated, a single thickness of metal may be used, a beveled flange being turned downward and outward, as before described. The rim or border of the button is composed of two parts. The lower (shown in Figs. 3 and 4 of the drawings) is made from a flat ring of metal struck up by means of dies, and thus forms a concavo-convex ring, of such construction that, when in position, it is concave from above and convex from below, its inner and outer edges being raised above the intermediate portion which forms the concavity, as shown in Fig. 4 of the drawings. The convex or outer surface of this rim may be thinly plated, but its concave surface is to be covered with a thin flat ring of solid or heavily-plated gold or silver, having its exterior and interior diameters respectively equal to the diameters of the lower part of the rim or border upon its upper edges, so that such upper part, when placed upon the lower part of the rim, shall rest upon the edges of the lower part and extend from the outside of the outer edge to the outside of the inner edge of such lower part, and thus entirely cover the concavity and the two edges thereof. The flat ring which constitutes the upper part of the rim or border is firmly united to the upper edges of the lower part of the rim or border, thus forming the completed hollow rim or border, as shown in Figs. 11 and 12 of the drawings. When, however, it is desired the lower part of the rim or border may be filled with lead, solder, or other like substance, and then the upper and lower parts may be united. The diameter of the circular opening of the rim or border is shortest in the plane of the upper surface of the rim or border, and at that point is less than the diameter of the upper face of the central portion of the button before described, so that when the rim or border is in position, and the central portion is introduced from below into the rim, the rim, by reason of its smaller diameter, will not permit the cen-

tral portion to pass up through far enough to rise to the level with the upper surface of the rim, but will be arrested in a lower parallel plane by the contact of the beveled edge or flange of the central portion with the convex surface of the rim, the construction of the parts being such that the beveled edge is, throughout its whole extent, in intimate contact with such convex surface when the parts are in their final position.

The several above-described parts, which compose the completed button or stud, may be united by brazing or soldering, or by any of the ordinary methods in practice among jewelers for such purposes.

It will readily be perceived that, by reason of the elevation of the upper surface of the rim or border above the plane of the central portion, the face or upper surface of the central portion will be almost perfectly protected from the wearing, rubbing, and abrasion to which the upper surfaces of buttons of the usual construction are subjected, so that, in buttons constructed by this process, or in this mode, if the central portion is covered with a very thin plating of gold or silver, the upper part of the rim or border being made of gold or silver, or having its upper surface heavily plated therewith, the central portion, by reason of the protection thus afforded, will retain its luster and brilliancy fully as long, if not longer, than the upper surface of the rim or border, while there is an absolute saving of the precious metals which must otherwise be employed. So, also, the outer convex surface of the rim or border, by reason of its decided inward slope from the upper edge of the rim downward, is but slightly exposed to wear and abrasion, the sharp upper edge being of

gold or silver, or heavily plated therewith, acting as a constant protection thereto; hence such convex surface can be covered with a very thin plating of precious metals and remain in perfect condition nearly, if not quite, as long as the upper surface of the rim or border.

Instead of the several parts which form the rim or border and the head of the central part of the button being struck up in circular forms, as has been described, they may be struck up with varying outlines, so that the head of the completed button or stud shall be elliptical, oblong, diamond, square, or rectangular in form, which last is shown in Figs. 15 and 16 of the drawing.

What is claimed as new is—

1. A stud or button, composed of two parts—a central part and a rim or border—the two being united by means of corresponding inclined faces, in such a manner, substantially as shown, as to raise the face of the border above the face of the center, for the purpose set forth.

2. A stud or button, composed of two parts—a center and a rim or border—the latter of which consists of a body covered by its face-plate, substantially as and for the purpose set forth.

3. A stud or button, in which the central part is surrounded by a separate rim or border, the outer surface of which slopes inward from the face toward the axial line of the button, substantially as and for the purpose indicated.

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Witnesses:

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