

UNITED STATES PATENT OFFICE.

WILLIAM W. COVELL, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
FREDERICK I. MARCY, OF SAME PLACE.

IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. **219,447**, dated September 9, 1879; application filed July 14, 1879.

To all whom it may concern:

Be it known that I, WILLIAM W. COVELL, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Buttons; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a view of the part of a button forming the subject of this invention. The button proper is shown in broken lines. Fig. 2 is a sectional view of the improved button-shoe. Fig. 3 shows the various parts that make up the improved button-shoe. Fig. 4 is a sectional view of the back plate of a button secured to a screw-wire. Fig. 5 is a view of the back plate of a screw-button.

This invention has reference to improvements in that class of jewelers' findings consisting of the back plate of buttons or studs, to which the shoe of the button or the screw-wire of the stud is secured; and the invention consists in the peculiar arrangement of the back plate and the post or screw-wire, so that the same can be secured without solder, as will be more fully set forth hereinafter.

In the drawings, *a* is the rear or back plate of a button or stud. It is provided with the conical recess *b*. This recess may be angular in plan, oval, or provided with the indentations *c c*, so that the post cannot turn in the plate when secured.

d is the post, provided with the conical head *e*, which head is of such form as will fit into the recess *b*—that is to say, if the recess is angular the head on the post is angular, if oval the head is oval, and if provided with the indentations *c c*, then the head is provided with the projections *f*; the post is inserted into the back plate, the sleeve *g* is passed over the

post, and the disk *h* is placed above the sleeve *g*, and the whole is secured together by upsetting the post in a press. The cover *i* is now secured by suitable dies, and the shoe can be soldered or otherwise secured to the front of the button.

When buttons or studs are to be provided with screw-wires, I prefer to make the recess *b* oval, and provide the end of the wire with an oval head, upset the wire, so as to hold it firmly in the plate *a*, and then coil the same in the usual manner.

I prefer to stamp the plate *a* out of a sheet of metal one side of which is covered with tin, so that when the plate is to be secured to the stud or button it does not require tinning before soldering.

The process of soldering any part of jewelry is very costly, as expert and skilled workmen are required to do this work. The heat also injures the temper of stamped or rolled metal and injures the color. To avoid all this and produce a better and cheaper article, I secure all the parts together without solder, as has been described heretofore.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the back plate of a button provided with the recess *b*, of the post *d*, sleeve *g*, and disk *h*, secured together, substantially as and for the purpose set forth.

2. The combination, with the back plate of a button provided with the recess *b*, of a post or wire provided with an enlargement to fit the recess, secured together by the upsetting of the wire or post, as described.

W. W. COVELL.

Witnesses:

JOSEPH A. MILLER,
JOSEPH A. MILLER, Jr.

W. W. COVELL.
Button.

No. 219,447.

Patented Sept. 9, 1879.

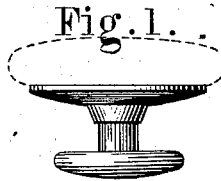


Fig. 2.

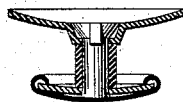


Fig. 3.

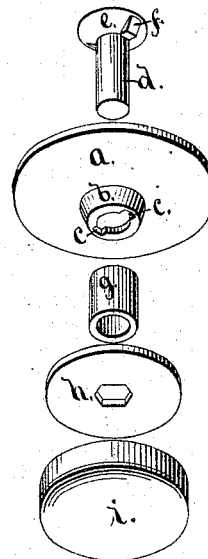


Fig. 4.



Fig. 5.



WITNESSES:

Joseph A. Miller Jr.
William L. Cooper

INVENTOR:

William W. Covell
by Joseph A. Miller
Attorney