A. S. FERNALD.
Buttons.

No. 210,194. Patented Nov. 26, 1878.

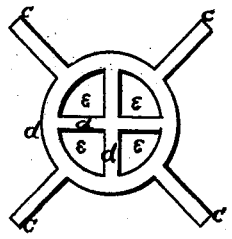

FIG. 1.

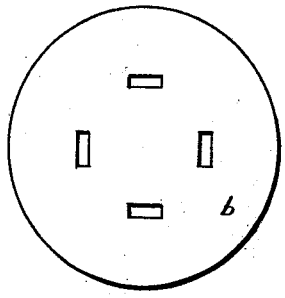

FIG. 2.

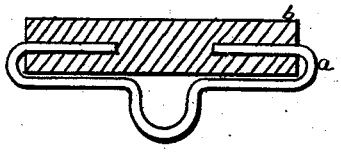

FIG. 3.

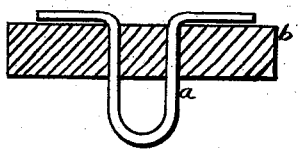

FIG. 4.

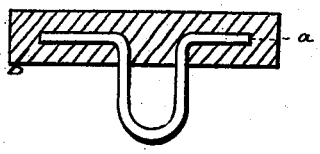

FIG. 5.

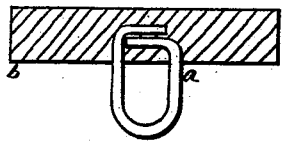

FIG. 6.

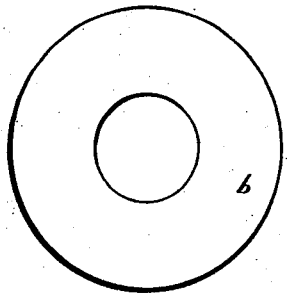

FIG. 7.

WITNESSES:
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INVENTOR:
Augustine S. Fernald

UNITED STATES PATENT OFFICE.

AUGUSTINE S. FERNALD, OF PORTLAND, MAINE.

IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. **210,194**, dated November 26, 1878; application filed September 12, 1878.

To all whom it may concern:

Be it known that I, AUGUSTINE S. FERNALD, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Buttons; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 shows a form of the strips that lap over the interior disk, *b*. Fig. 2 shows a form of interior disk to receive the strips, Fig. 1. Figs. 3, 4, 5, and 6 show different modes of applying the wire to the interior disk. Fig. 7 shows another form of the interior disk.

Letters Patent No. 203,022, and of date April 30, 1878, of the United States, have already been granted to me for certain improvements in buttons.

My present application is for certain improvements upon the parts of that invention, which improvements relate to the method of applying the wire *a* or its equivalent to the interior disk, *b*. As illustrated in the drawings, this wire or strip of metal is bent in some manner over the disk *b*. Over or on the top of this disk is the cap or top disk of the button. The office of this cap is, in my invention, to keep the bent ends of the wires pressed down flat, so that they will not fall out. Neither this cap nor the bottom disk or collet is exhibited in the drawings, for the reason that my present claim relates only to the method of applying the wire *a* to the interior disk, *b*.

The loops of the wire or wires shown in the several figures are intended to project through the hole in the collet inside of a covering of cloth. In case where no collet is used, the wire or strips project down on the lower side of the button, being covered with an envelope of cloth.

In Fig. 1 is shown a form of wire or strips intended to penetrate through the disk *b*, and then to be bent down on the top of said disk. These parts thus used are seen at *c*.

Figs. 2 and 7 show the interior disk of the button. The parts *c* may pass either through a round hole, as in Fig. 7, or through slits cut through the disk, as in Fig. 2.

The parts *d* are the parts projecting from the bottom of the button, through the spaces *e* of which pass the sewing-threads.

Fig. 3 shows a method of attaching the wire, where the same, instead of being bent up on the top of the disk, is thrust into it, and, being bent down, is held in place.

Fig. 4 shows the wire thrust through the disk, and then bent down on the top face of the same.

Figs. 5 and 6 show the wire or wires passing partly through the disk, and then bent down, as shown, in order to hold it in place. In all these the holding of the central or interior disk, *b*, between the two outside top and bottom parts of the button secures the wires in place.

The form shown in Fig. 1 can be cut or stamped out of a piece of sheet metal.

I am aware of buttons where a wire is laid up against the bottom side of the disk *b*, with its loop to project through a hole in the collet. This is the case with Hornich's patent, August 3, 1875; but such wires are not held by the top cap or disk holding the bent-down ends from turning up when force is exerted on the loop.

All of the wires have the loop which projects at the bottom of the button at the center, in order to receive the sewing-threads.

The advantage of having the wires or strips pass up through the interior disk is, that they are not then likely to make the edge of the button irregular, or to mark the cloth which covers the same.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The wire *a*, passing either into or through the interior disk, *b*, having the loop to receive the sewing-threads, and having its ends bent down flat, as herein described, in order to hold the wire in place, as shown and set forth.

2. The wire or strips *a c*, stamped or cut out from a single piece of metal, as shown, in combination with the interior disk, as and for the purposes described.

In testimony that I claim the above I have hereto set my hand this 7th day of September, A. D. 1878.

AUGUSTINE S. FERNALD.

Witnesses:

WILLIAM HENRY CLIFFORD,

FRANCIS MARION SENNETTE.