

(No Model.)

H. C. LUTHER.  
METALLIC EYE FOR BUTTONS.

No. 281,637.

Patented July 17, 1883.

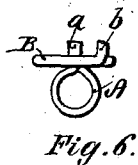


Fig. 1.



Fig. 2.

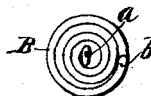


Fig. 3.

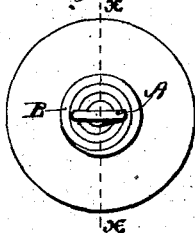


Fig. 4.

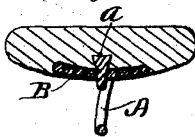
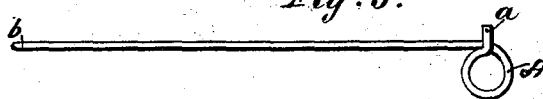


Fig. 5.



Witnesses.

*Lucius Scholfield*  
*Henry B. Young*

Inventor.

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# UNITED STATES PATENT OFFICE.

HENRY C. LUTHER, OF PROVIDENCE, RHODE ISLAND.

## METALLIC EYE FOR BUTTONS.

SPECIFICATION forming part of Letters Patent No. 281,637, dated July 17, 1883.

Application filed May 11, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. LUTHER, of Providence, in the State of Rhode Island, have invented an Improvement in Metallic Eyes for Buttons, of which the following is a specification.

The nature of my invention consists in a metallic eye made of wire and combined with a collar made integral with the eye by winding one end of the wire in an involute spiral, as hereinafter fully set forth.

Figure 1 is a side elevation of my improved eye and collar for buttons. Fig. 2 is a plan view of the spirally-wound collar, taken on the side opposite the eye. Fig. 3 is a plan view of the under side of the button with the eye and collar attached thereto. Fig. 4 is a section taken in the line *x x* of Fig. 3. Fig. 5 is an elevation showing the eye formed at one end of the wire previous to winding the spiral collar. Figs. 6 and 7 show modifications of my improvement in side elevation.

In the accompanying drawings, A is the eye, and B the collar, formed by winding one end of the wire which serves to form the eye into an involute spiral, as shown in Figs. 2 and 3, the eye being first formed near one end of the wire, as shown in Fig. 5. In winding the spiral collar B, the end *b* of the wire may be carried to one side of the collar, as shown in Fig. 1, and then swaged down upon the spiral coil. The end *b* may also be left in the plane of the coils, as shown in Fig. 7, and in that case it may be cut tapering, in order to produce an approximate circular edge. The end *a* of the wire may be bent or flattened, in order to obtain sufficient hold upon the glass

or other material of which the button-head is made to hold the eye firm and secure, and the end *b* may also be turned upward, as shown in Fig. 6, and used to form an additional hold on the material of the button.

Heretofore in using an eye made of wire in the manufacture of pressed or molded buttons it has been found necessary to employ there-with a perforated disk of sheet metal, serving to prevent the glass or other material from passing from the mold into the eye, or otherwise causing the disfiguration of the back of the button, the metallic eyes being made in one machine and the sheet-metal collar in another, and the separately-made parts united by hand; but I have produced a combined eye and collar of desirable appearance which may be made in one piece by means of automatic machinery, and in proper condition for immediate insertion into the mold to form a button; and my improvement is also adapted for the manufacture of metallic buttons, the eye and collar shown in Fig. 7 being employed in this case, the spiral coil providing a suitable base for the ready attachment of the eye to the button-head by means of solder.

I claim as my invention—

An improved metallic eye for buttons, consisting of a wire spiral forming a collar and a depending integral shank or eye, all constructed and adapted for use substantially as shown and described.

HENRY C. LUTHER.

Witnesses:

SOCRATES SCHOLFIELD,  
R. A. BRIGHT.