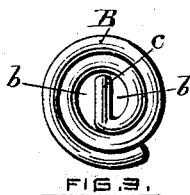
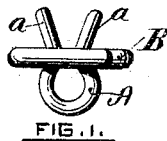


(No Model.)

H. C. LUTHER.  
BUTTON EYE.

No. 310,898.

Patented Jan. 20, 1885.



WITNESSES:

Gas. F. Schmelz

Leonard Scholfield

INVENTOR:

Henry C. Luther

per. S. Scholfield  
Attorney

# UNITED STATES PATENT OFFICE.

HENRY C. LUTHER, OF PROVIDENCE, RHODE ISLAND.

## BUTTON-EYE.

SPECIFICATION forming part of Letters Patent No. 310,898, dated January 20, 1885.

Application filed November 7, 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 Button-Eyes, of which the following is a specification.

My invention relates to the construction of fastening-eyes adapted for the manufacture of glass or composition buttons; and it consists in the improved combination of a spirally-wound wire collar with a separately-formed eye, as hereinafter set forth.

Figure 1 is an elevation of my improved button eye and collar. Fig. 2 is a sectional view of the same. Fig. 3 is a plan view of the spirally-wound wire collar. Fig. 4 is a separate elevation of the button-eye without the collar.

In the accompanying drawings, A is the eye, formed of wire, the end portions of the wire beyond the turned eye being arranged to form the shank *a a*, adapted for the purpose of attachment to the collar B, as shown in Figs. 1 and 2. The collar B, which serves to prevent the melted glass from flowing into the eye A when under the compressing action of the forming-dies, is made by winding a piece of wire in an involute spiral form, as shown in Fig. 3. At the initial starting-point of the spiral of the coil B are formed the two openings *b b*, adapted

for the reception of the shank-wires *a a* of the eye A, the wires *a a* being separated from each other by the initial winding end *c* of the collar B. My improved button-eye is adapted for manufacture by means of automatic machinery, and may be successfully made without waste of stock, which is a matter of importance in such articles.

I am aware that a button-collar made of wire is not new, and that a collar made to yield to the contraction of the glass head of the button has been heretofore used; but I am not aware that such a collar has ever been made in circular form without a necessary waste of material in its manufacture, which waste is overcome by my invention. I do not, therefore, make a claim to a yielding collar for the eyes of glass buttons; but

I claim as my invention—

The combination of the eye provided with the shank-wires with the involute spiral wire collar provided with openings for the reception of the shank-wires at opposite sides of the initial end of the wire coil of the collar, substantially as described.

HENRY C. LUTHER.

Witnesses:

DEXTER B. POLTER,  
SOCRATES SCHOLFIELD.