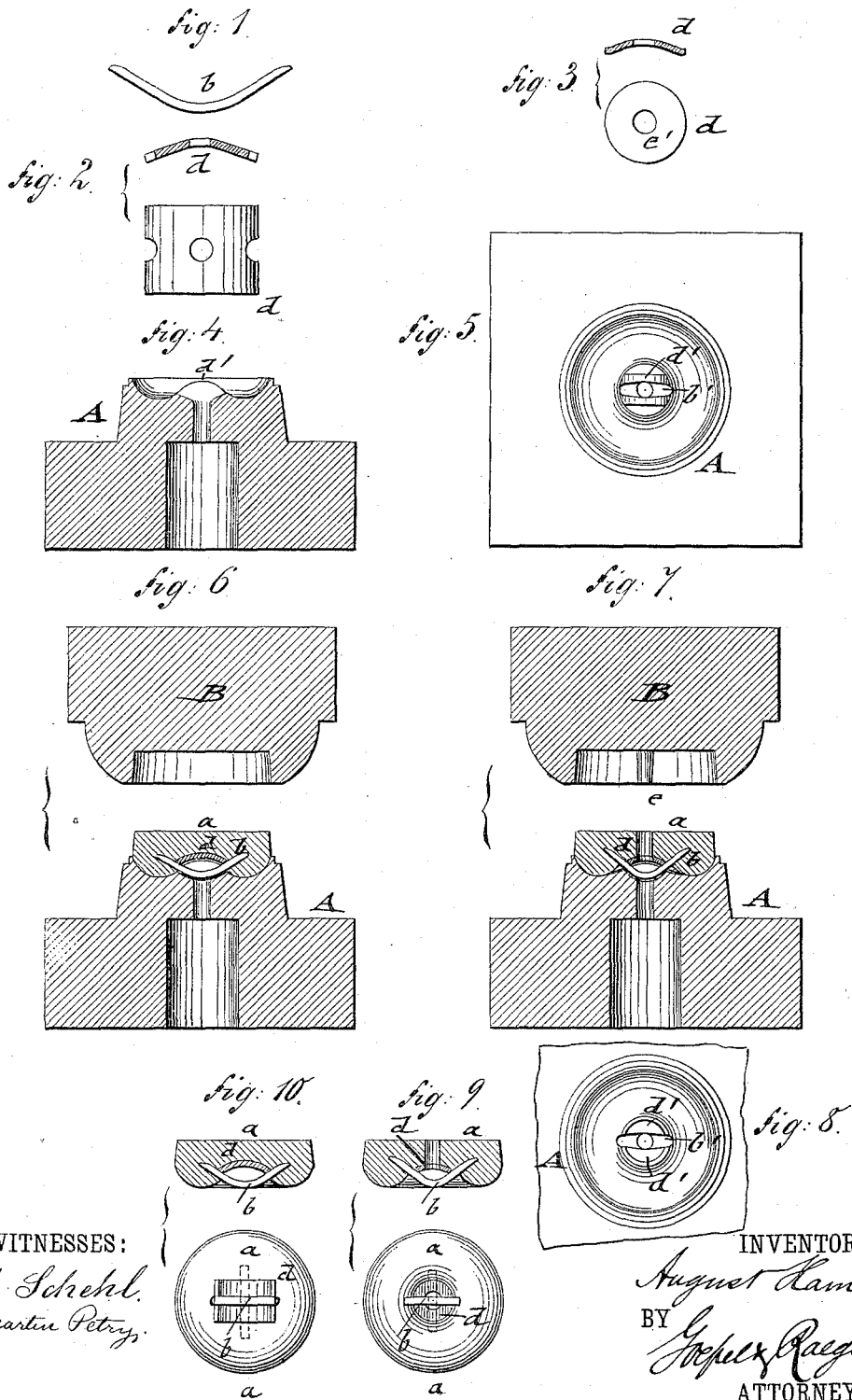


(No Model.)

A. HAMANN.  
GLASS BUTTON.

No. 302,725.

Patented July 29, 1884.



WITNESSES:  
*A. Schehl.*  
*Martin Petry.*

INVENTOR  
*August Hamann*  
BY *Joseph Raegner*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

AUGUST HAMANN, OF HOBOKEN, NEW JERSEY.

## GLASS BUTTON.

SPECIFICATION forming part of Letters Patent No. 302,725, dated July 29, 1884.

Application filed June 5, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST HAMANN, of Hoboken, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Glass Buttons, of which the following is a specification.

This invention relates to glass buttons with metallic eyes; and it consists of a glass button provided with a bent transverse shank, the ends of which are embedded into the body of the button, said shank forming, in connection with a concave metallic plate or cap at the under side of the button, the eye of the same.

In the accompanying drawings, Figure 1 represents a detail side view of the wire shank which forms the eye of my improved glass button. Figs. 2 and 3 are details of the concave cap-plate that forms, with said shank, the eye of the button. Figs. 4 and 5 are respectively a vertical central section and a plan of the die employed for making my improved glass button. Figs. 6 and 7 represent sections of the upper and lower dies, showing the same in the act of forming a button without and with a central opening. Fig. 8 is a top view of the bottom die shown in Fig. 7, and Figs. 9 and 10 are vertical transverse sections and bottom views of my improved button when finished.

Similar letters of reference indicate corresponding parts.

My improved button consists of three parts: a glass body, *a*, a bent-wire shank, *b*, and a metallic cap-plate, *d*, of concavo-convex shape. The wire shank *b* and cap *d* are united with the glass body *a* of the button in the dies, for which purpose the bottom die, *A*, is provided with a transverse concave recess or depression, *b'*, and with convex portions *d'* at both sides of the same, respectively, for the wire shank *b* and cap-plate *d*. The wire shank *b* is bent before being placed into the concave depression *b'* of the bottom die, *A*, as shown in Fig. 1, so that the ends of the same extend above the depressed annular main portion of the same. The concavo-convex cap *d* is next placed on the raised portions *d'* of the bottom die and retained in position thereon by the projecting ends of the shank *b*. Then the soft-glass stock is placed on the bottom die, *A*, and the upper die, *B*, lowered, which presses the glass into the bottom die around the cap-plate *d* and the ends of the wire shank

*b*, so as to embed them into the glass body. When it is desired to form in the button a central opening for the passage of the needle, the upper die, *B*, is provided with a fixed center pin, *e*, the cap-plate *d* being then provided with a central opening, *e'*, for the center pin, *e*, as shown in Figs. 3 and 7. In this case, if the upper die, *B*, is lowered, a small portion of the glass stock is pressed by the center pin, *e*, through the opening *e'* of the cap *d* and retained below the cap by the wire shank. This small piece of glass is easily removed by means of a pin or other pointed instrument after the button has cooled off. The bent middle portion of the wire shank *b* and the concave cap *d* form a neatly-finished eye for the thread, the cap-plate imparting a finish to the central bottom portion of the glass button above the shank. If desired, a second wire shank, *b'*, may be arranged at right angles to the first shank, so as to pass across the same, as shown in dotted lines in Figs. 10 and 11, which, for some purposes, is preferable, as the fastening-thread may be thereby placed across the wire shanks in a manner corresponding to the fastening-thread of four-holed buttons.

My improved glass button is finished by one operation of the dies, which form a reliable connection of the shank with the body of the button and a neatly-finished under side and eye.

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

1. A glass button composed of a body, a concave cap-plate at the under side of the body, and a bent-wire shank the ends of which are embedded in said body, substantially as set forth.

2. A glass button consisting of a body having a central opening, a concave centrally-perforated cap-plate at the under side of said body, and a bent-wire shank the ends of which are embedded in said body, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

AUGUST HAMANN.

Witnesses:

PAUL GOEPEL,  
SIDNEY MANN.