## A. HAMANN.

## MANUFACTURE OF GLASS BUTTONS.

No. 285,125.

Patented Sept. 18, 1883.

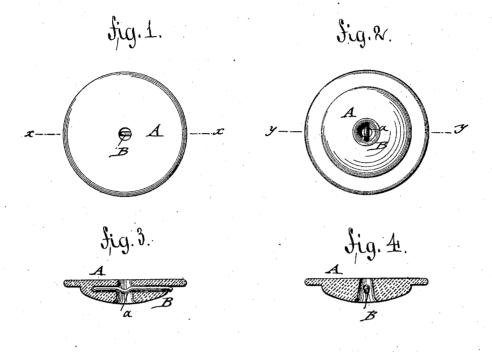


fig. 5.

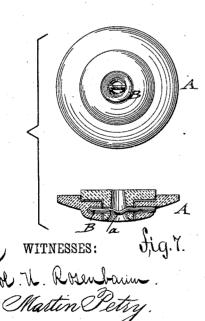
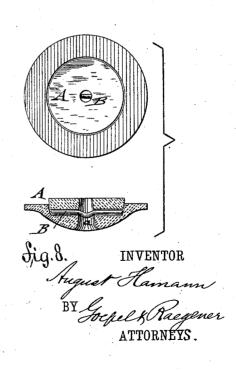


Fig.6.



N. PETERS. Photo-Lithographer. Washington. D. C

## United States Patent Office.

AUGUST HAMANN, OF HOBOKEN, NEW JERSEY.

## MANUFACTURE OF GLASS BUTTONS.

SPECIFICATION forming part of Letters Patent No. 285,125, dated September 18, 1883.

Application filed June 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, August Hamann, of Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and 5 useful Improvements in the Manufacture of Glass Buttons, of which the following is a specification.

In glass buttons as heretofore manufactured there was formed across the holes a narrow to transverse partition-plate, which was liable, by its sharp edges, to cut the thread by which the buttons were attached to the garments, and which was frequently broken in using the button, so that it dropped off.

The object of this invention is to furnish a glass button having a stronger and more permanent partition for attaching the fastening-thread; and the invention consists of a glass button into which is embedded, while it is formed in the dies, a transverse piece of wire. The middle portion of this wire within the eye of the button is bent by nippers.

In the accompanying drawings, Figure 1 represents a front view; Fig. 2, a rear view. Figs. 3 and 4 are vertical transverse sections, respectively, on lines x x, Fig. 1, and y y, Fig. 2, of my improved glass button. Figs. 5, 6, 7, and 8 are top views and sections of modified constructions of my button.

30 Similar letters of reference indicate corre-

sponding parts. A in the drawings represents a button of my improved construction, which may be made either of one piece of glass or other plastic 35 material or of two pieces, both of glass, or one part of glass and the other part metal, as the case may be. While the glass or other plastic material composing the button is formed in the dies, a transverse perforation is pierced 40 diametrically across the body of the button by means of a pin that is guided in a transverse perforation of the lower die-section. This pin is inserted while the glass or other material is still in plastic state and before it has hardened. This feature has been used heretofore, and I do not claim the same. When the glass but-

ton A has hardened, it is removed from the

of two subscribing witnesses.

AUGUST HAMANN.

I Witnesses:

PAUL GOEPEL, SIDNEY MANN.

dies and a straight piece of round wire, B, inserted into the diametrical perforation of the button. The middle portion of the wire 50 B is bent by means of nippers, which are inserted from opposite sides into the eye of the button, the bent portion a serving to establish the rigid connection of the wire with the body of the button. The fastening-thread by 55 which the button is attached to the garment is drawn across the bent portion a of the crosswire B. The button may also be made of two sections, as shown in Figs. 5 and 7, in which case both sections are perforated by the pin, 60 the wire B being then inserted and bent, as before described.

In Figs. 6 and 8 a button is shown which is made of two sections, the adjoining faces of which are formed with diametrical grooves. 65 The wire B is placed in position in the groove of the main section and the second section then cemented to the main section, so as to retain thereby the wire B, which is then bent at its middle portion by the nippers.

at its middle portion by the nippers. 70 In this manner glass buttons with metallic cross-bars are obtained that can be attached close to the fabric, and which are stronger and more durable than the glass buttons heretofore in use, as the cross-bar cannot break nor 75 cut the fastening-thread.

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

The method herein described of making glass buttons with permanent cross bars or 80 shanks, which consists, first, in forming a transverse perforation in the body of the button while the same is in a plastic state; secondly, inserting a straight wire into said perforation; and, lastly, bending the middle part of said 85 wire that extends across the eye of the button, 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.