

(No Model.)

R. E. BYRNE.

ART OF FASTENING HEADS TO POSTS OF COLLAR BUTTONS.

No. 595,143.

Patented Dec. 7, 1897.

Fig. 1.

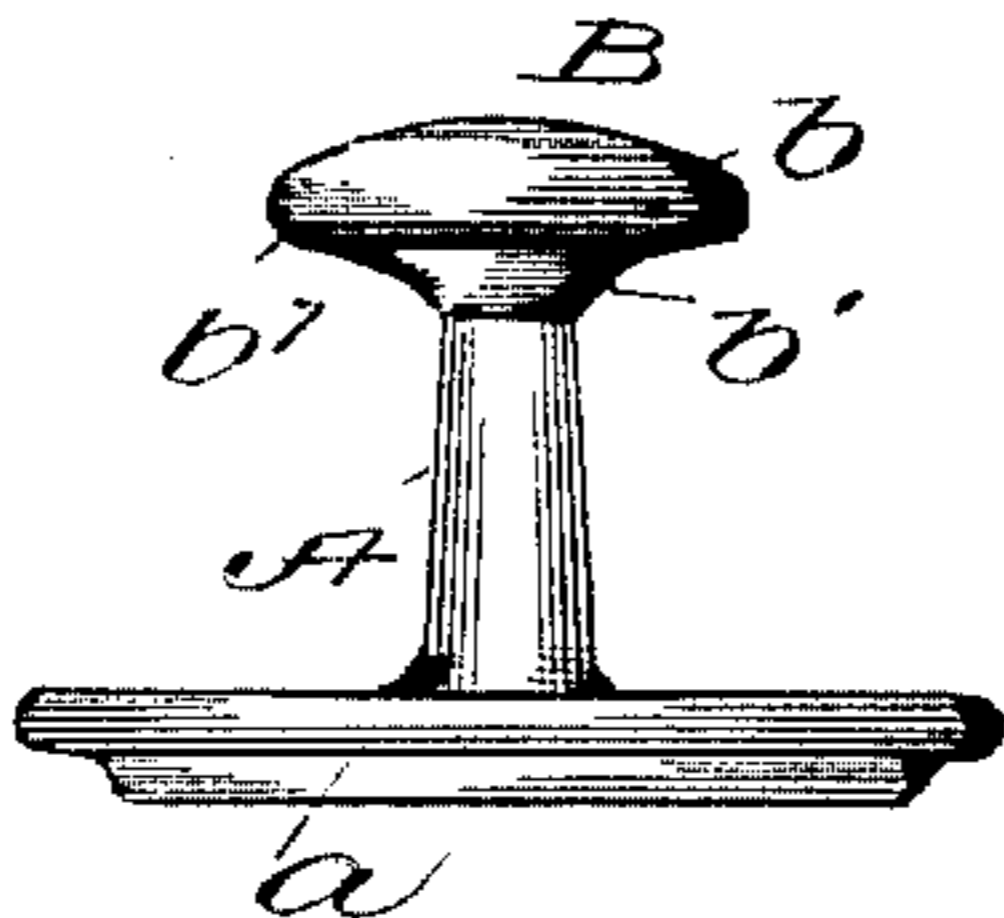


Fig. 2.

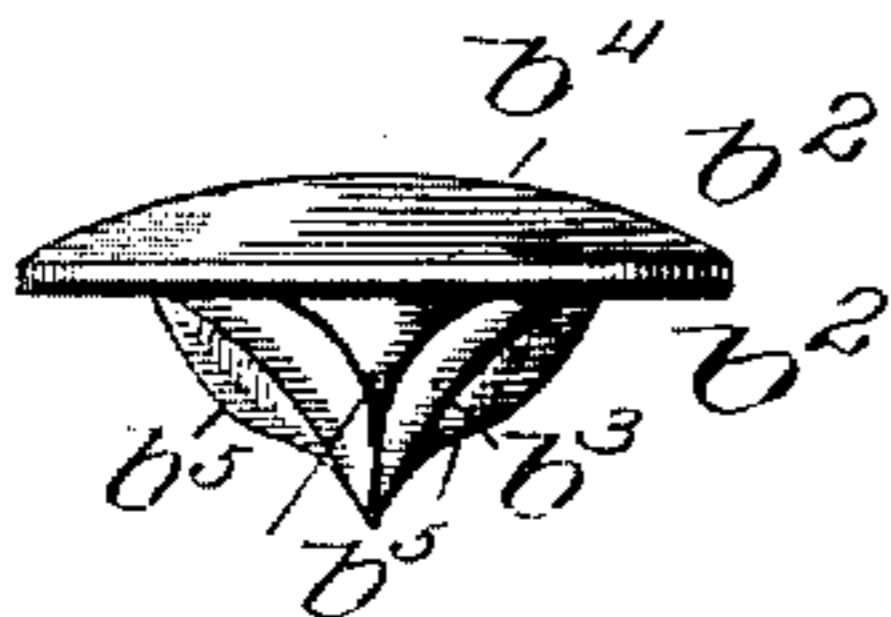


Fig. 3.



Fig. 5.

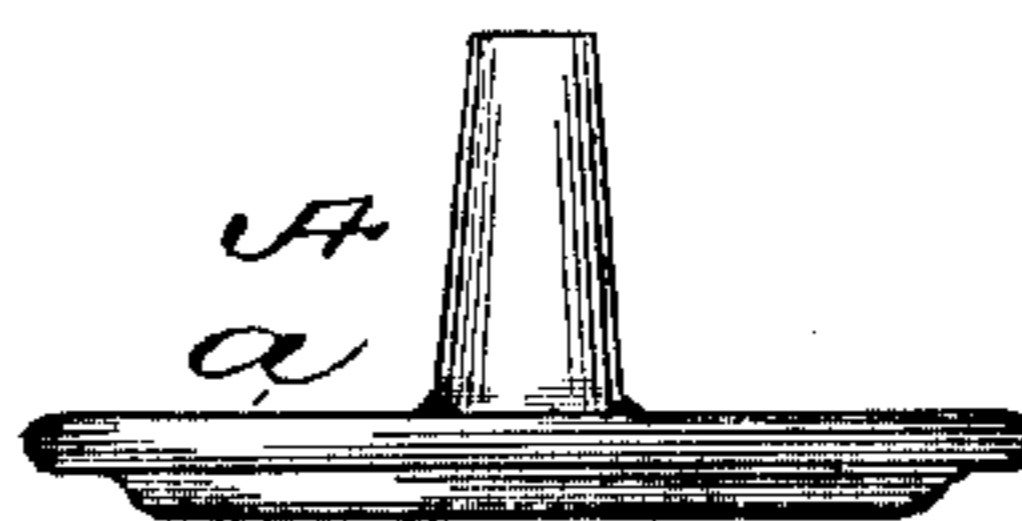


Fig. 4.



Fig. 8.

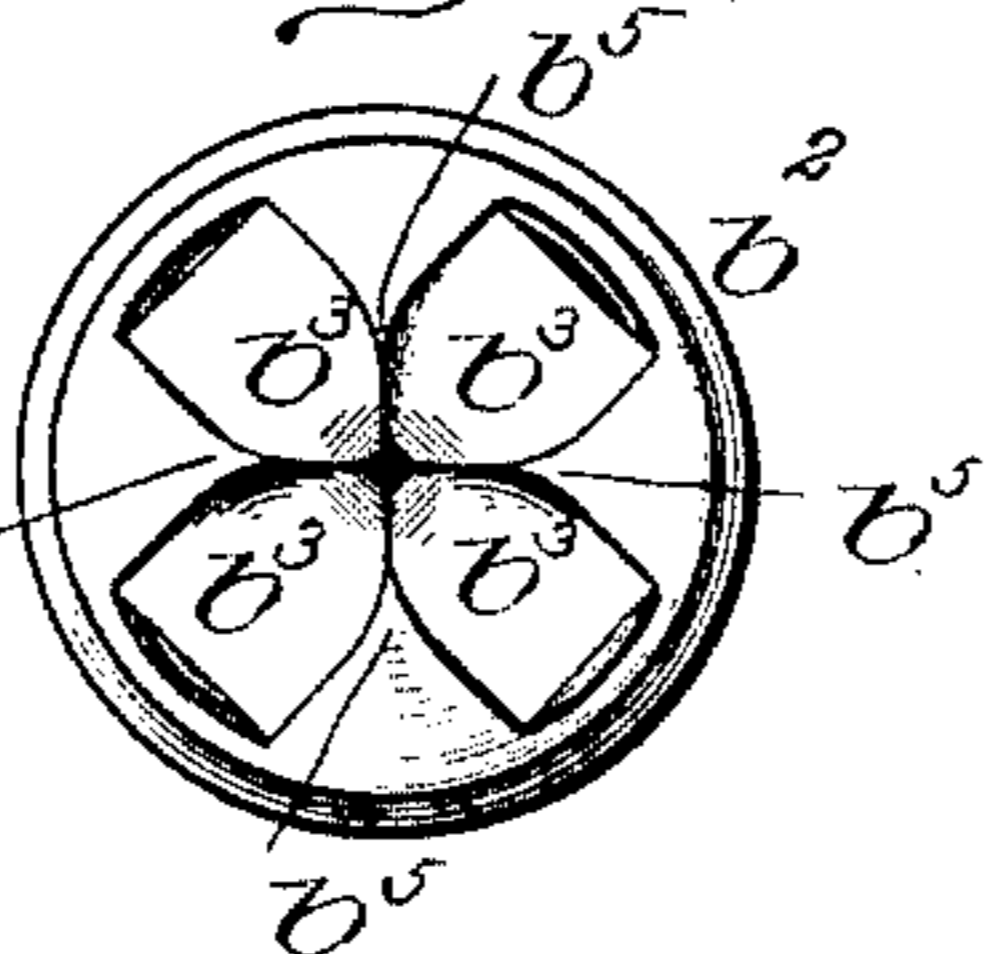


Fig. 6.

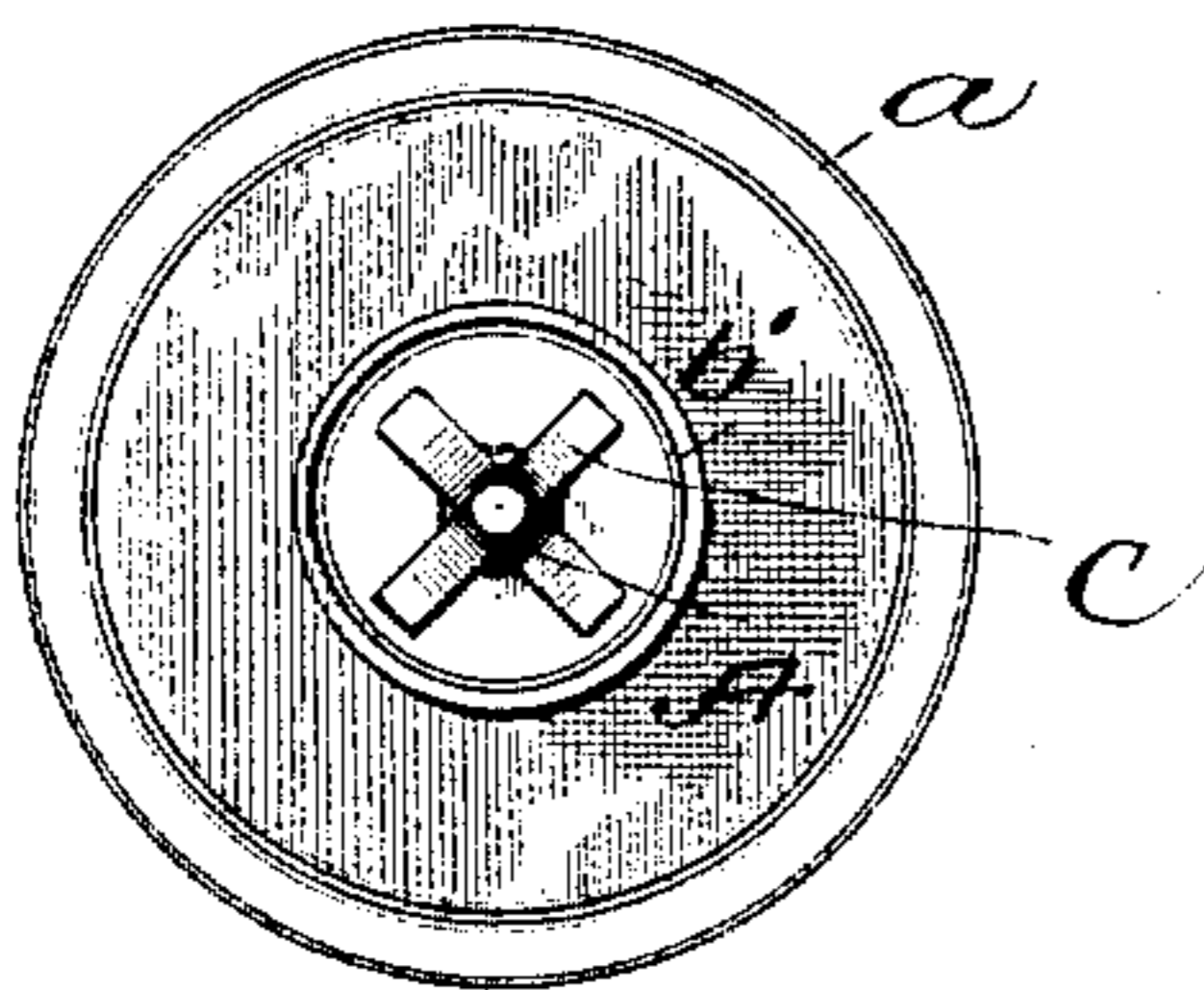
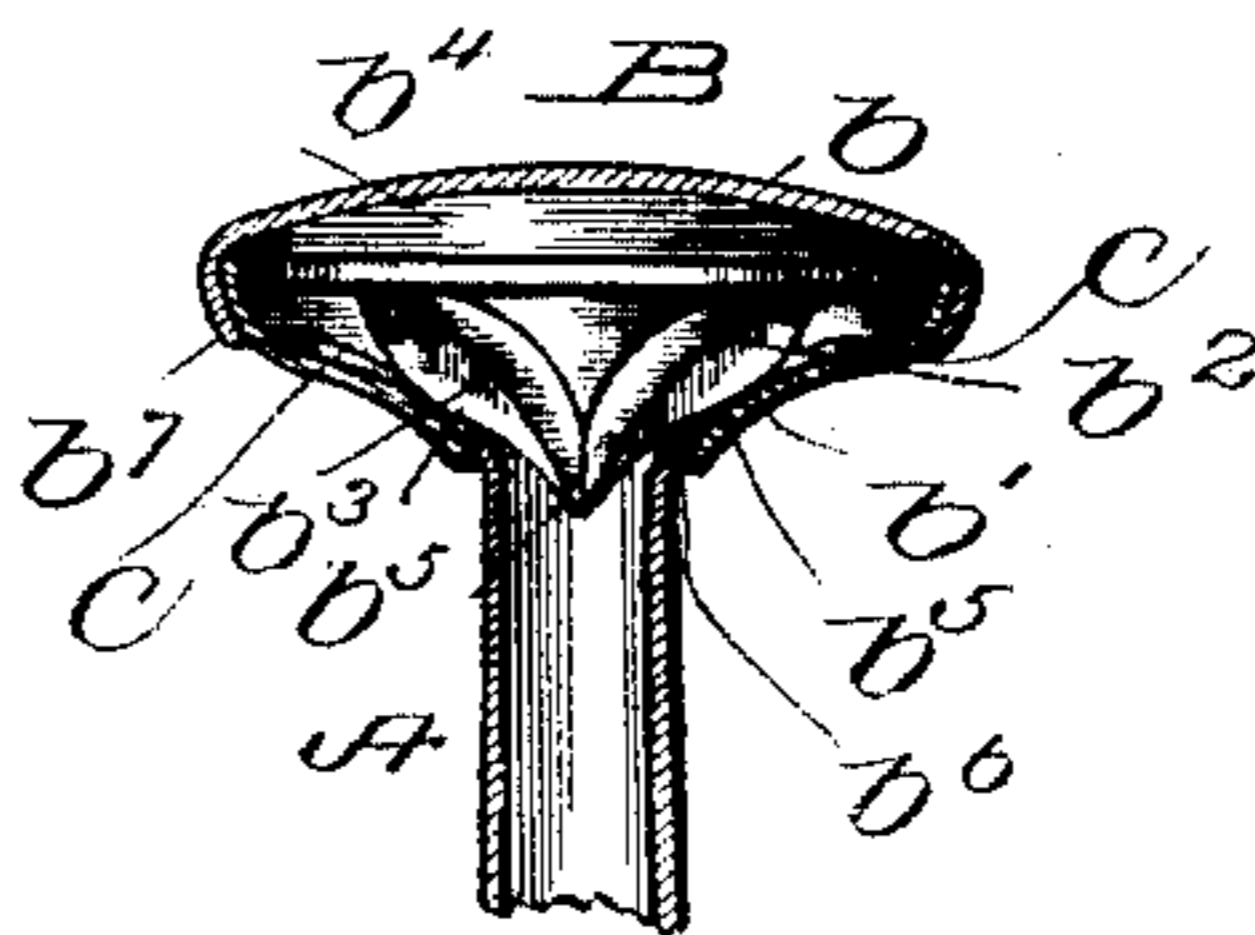


Fig. 7.



Witnesses

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ART OF FASTENING HEADS TO POSTS OF COLLAR-BUTTONS.

SPECIFICATION forming part of Letters Patent No. 595,143, dated December 7, 1897.

Application filed August 24, 1896. Serial No. 603,802. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. BYRNE, a citizen of the United States, residing at Providence, in the county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Collar and Cuff Buttons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in collar and cuff buttons; and it has for its object the construction of an article of manufacture of this character in which the head is firmly and securely united to the shank portion in such manner that the use of solder is dispensed with and all liability of twisting or bending of said head is entirely overcome.

In carrying out my invention I employ a tubular shank provided with a suitable base portion. On the upper end of said shank rests a die or spreader which is inclosed within a suitable cap and cap-lining, which latter are designed to form the head of the button. When the parts are properly positioned, pressure is applied simultaneously to all of them, whereby said die or spreader is caused to split the end of said shank and turn the split portions back upon the cap-lining, the lower edge of the cap being at the same time turned to embrace the latter. By this means the head will be firmly united to the shank without the use of solder and the danger of twisting or bending the parts is reduced to a minimum.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of my improved button. Fig. 2 is a side view of the die or spreader enlarged. Figs. 3 and 4 are side views of the cap-plate and cap-lining, respectively, the latter being enlarged. Fig. 5 is a similar view of the shank and its base. Fig. 6 is a top plan view of the button with the cap-plate and die or spreader removed, the end of the shank being shown as split. Fig. 7 is a longitudinal sectional view of the button as an entirety. Fig. 8 is an enlarged bottom plan view of the die or spreader.

Referring to the drawings, A is a tubular post having a lower circular base *a*, said parts being made of thin flat stock in the usual or ordinary manner.

B designates the head, which comprises a hollow cap-plate *b*, cap-lining *b'* of frusto-conical form, and a die or spreader *b²*, located within said cap-plate and resting on said cap-lining. Said die or spreader is composed of a pyramidal or conical center having not more than four sides *b³* and a circular base *b⁴*. The sides *b³* are concaved, and points *b⁵*, constituting cutting edges, are raised on the angles formed thereby. The cap-lining *b'* is provided with a central hole or opening *b⁶*, through which is designed to project the upper end of shank A.

In practice the upper end of shank A is first projected through the hole or opening *b⁶* of the cap-lining, after which the die or spreader *b²* is placed upon the end of said shank, the cutting edges *b⁵* engaging the top edges of the latter. The cap-plate *b* is then placed over said die or spreader, the lower edge *b⁷* extending below the cap-lining *b'*. When the parts are thus positioned, pressure is applied thereto by any suitable machine, (not shown,) said pressure causing the die or spreader to split the projecting end of shank A into four fingers C, which are bent back against the inner face of the cap-lining. At the same time the edge *b⁷* of the cap-plate is beaded, so as to embrace the lower edge of the latter, whereby all of said parts are firmly united to said shank.

The advantages of my invention will be apparent to those skilled in the art to which it appertains. It will be specially observed that the edges of the die or spreader will fit between the split portions of the shank, whereby twisting of the head independent of said shank is prevented.

A special advantage of constructing a collar-button in accordance with my invention is that a strong and durable article can be made out of comparatively light stock and the use of solder is obviated, this latter feature rendering the employment of skilled labor unnecessary.

I claim as my invention—

1. The herein-described improved button having a tubular shank, a head, and an in-

dependent pyramidal spreader between said head and shank provided with raised cutting edges adapted to split the end of the latter when pressure is applied thereto, as and for the purpose set forth.

2. The herein-described improved button having a tubular shank, a head, and an independent pyramidal spreader between said head and shank provided with concaved sides and intermediate cutting edges adapted to split the end of said shank, as and for the purpose set forth.

3. The herein-described improved button

having a tubular shank, a cap-lining through which said shank is projected, a spreader having raised cutting edges adapted to split the end of said shank whereby the latter is secured to said cap-lining, and a cap-plate adapted to be secured to said cap-lining, all of said parts being united by pressure, said spreader being located between said cap-plate and said shank, as stated.

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Witnesses:

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