(No Model.)

S. COTTLE.

METHOD OF MAKING BUTTONS.

No. 384,226. Patented June 5, 1888.

Fig. 1.

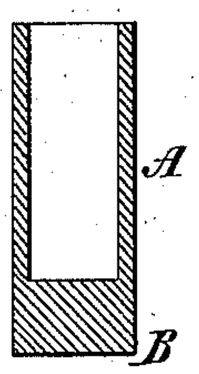


Fig. 2.

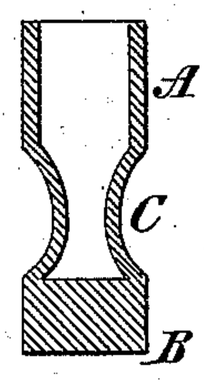


Fig. 3.

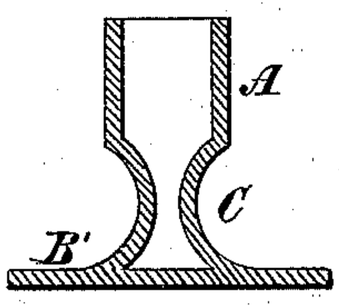


Fig. 4.

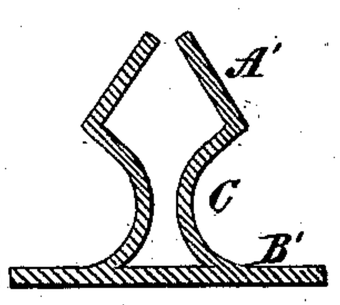


Fig. 5.

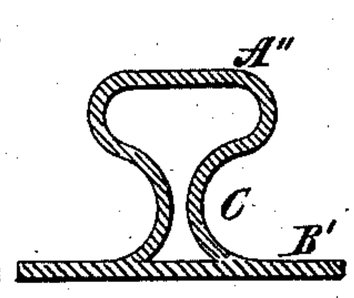


Fig. 6.

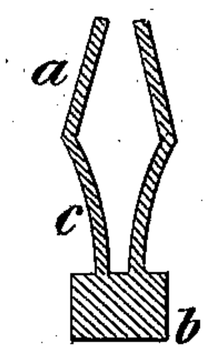


Fig. 7.

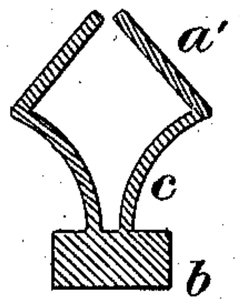
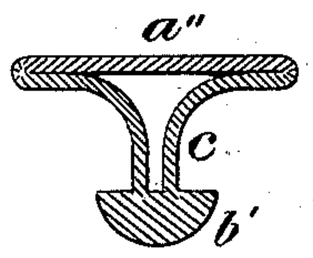


Fig. 8.



WITNESSES:

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his ATTORNEY.

UNITED STATES PATENT OFFICE.

SHUBAEL COTTLE, OF NEW YORK, N. Y.

METHOD OF MAKING BUTTONS.

SPECIFICATION forming part of Letters Patent No. 384,226, dated June 5, 1888.

Application filed December 9, 1887. Serial No. 257,385. (No model.)

To all whom it may concern:

Be it known that I, SHUBAEL COTTLE, of the city, county, and State of New York, have invented a new and useful Process for the Manufacture of Stud, Collar, or Sleeve Buttons, of which the following is a specification.

My invention consists in a new process of manufacturing a stud, collar or sleeve button from a single piece of metal, the said button consisting of two flanged portions united by a hollow shank or post, one of said flanged portions being of solid metal.

In the accompanying drawings, Figures 1 to 5, inclusive, are sectional views of my button during different successive stages of its manufacture. Figs. 6 to 8, inclusive, exhibit the successive stages of a button made by a modification of my process. In the process illustrated by Figs. 1 to 5 the solid portion of the button is flattened and drawn out to form a solid base or back. In Figs. 6 to 8 this portion of the button is rounded or otherwise suitably shaped to produce a head.

Similar letters of reference indicate like parts.

I first produce a tube of metal, A, having at one end a solid portion, B, as shown in Fig. 1. I next draw said tube into the shape shown in Fig. 2. The solid part B is then flattened or drawn out to produce the solid back B′, as shown in Fig. 3. This I may do by upsetting. The button is next adjusted in the lathe, so that the open end A, Fig. 3, is conveniently presented to the action of a spinning-tool, and by means of this tool the circumferential edge is spun inward, as shown at A′, Fig. 4. This spinning operation is continued until the opening is entirely closed by the metal meeting, when the upper surface of the head A′, Fig. 5, is finally smoothed off, thus completing the construction of the button, which, as shown in the last-mentioned figure, has a solid back and a hollow shank and hollow head.

I may equally well from the form of blank shown in Fig. 2 produce a button having a solid head in lieu of a solid back. The metal at the circumferential edge of the opening is approximated, as shown at *a* in Fig. 6, and finally brought into contact, so closing the aperture, as indicated at *a′*, Fig. 7. The hollow portion of the button thus closed is finally flattened to produce the back or base *a″*, Fig. 8, and the solid end, if desired, is flattened and rounded, as shown at *b′*.

In another application for Letters Patent, filed November 21, 1887, Serial No. 255,708, and now pending, I have fully described and claimed the construction of a stud, collar, or sleeve button, having a hollow post and shank and solid back and formed from a single piece of thin metal without opening into its interior. The subject-matter of said application is therefore herein disclaimed.

I claim—

1. The process of manufacture from a single piece of metal of a stud, collar, or sleeve button having two flanged portions united by a hollow shank or post, one of said flanged portions being hollow and the other solid, which consists in first producing a tube of thin metal, A, having at one end a solid or thickened portion, B; second, compressing and so reducing the diameter of said tube adjacent to said thickened portion B, as at C, and, third, closing the open end of said tube by pressing into close contact the metal around the edge of the opening in said tube, substantially as described.

2. The process of manufacture from a single piece of metal of a stud, collar, or sleeve button having a hollow head, a hollow shank, and a solid back or base, which consists in first producing a tube of thin metal, A, having at one end a solid or thickened portion, B; second, compressing and so reducing the diameter of said tube adjacent to said thickened portion B, as at C; third, drawing out or flattening said solid or thickened portion B, as at B′, and, fourth, closing the open end of said tube by pressing into close contact the metal around the edge of the opening in said tube, substantially as described.

3. The process of manufacture from a single piece of metal of a stud, collar, or sleeve button having a back and shank of thin metal and a solid head, which consists in first producing a tube of thin metal, A, having at one end a solid or thickened portion, B; second, compressing and so reducing the diameter of said tube adjacent to said thickened portion, as at C; third, closing the open end of said tube by pressing into close contact the metal around the edge of the opening in said tube, as at *a′*, and, fourth, flattening the portion so closed, as at *a″*, substantially as described.

SHUBAEL COTTLE.

Witnesses:

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