

(No Model.)

S. W. SHOREY.

BUTTON.

No. 283,032.

Patented Aug. 14, 1883.

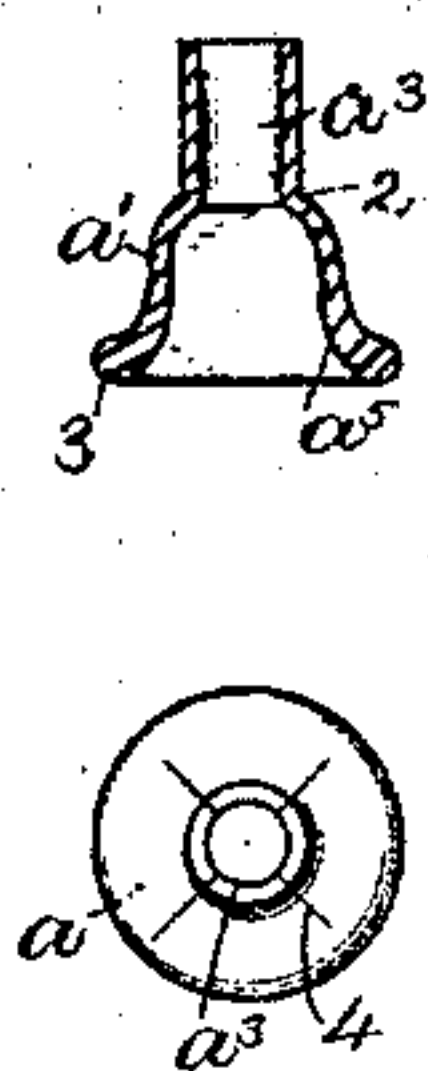
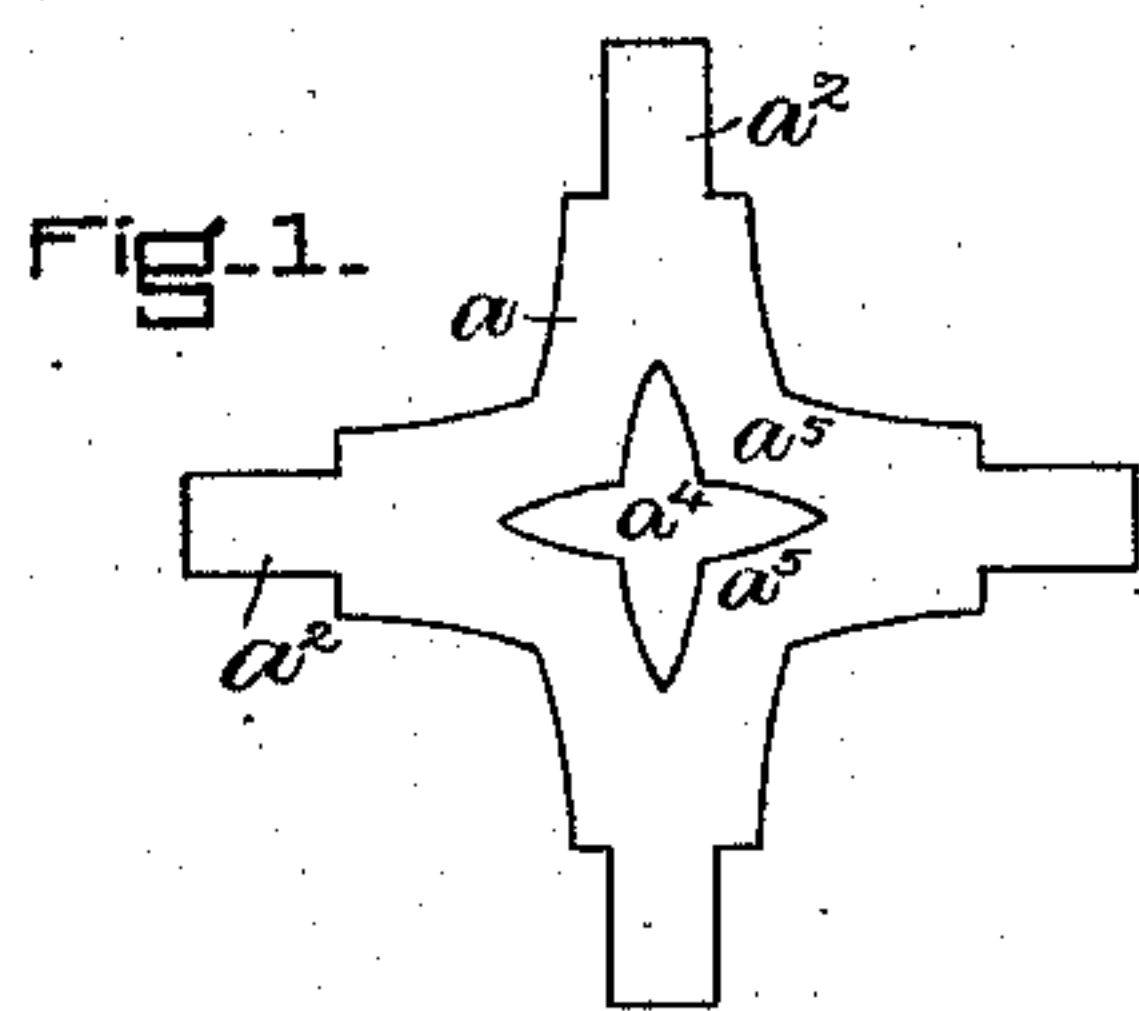


Fig-2-

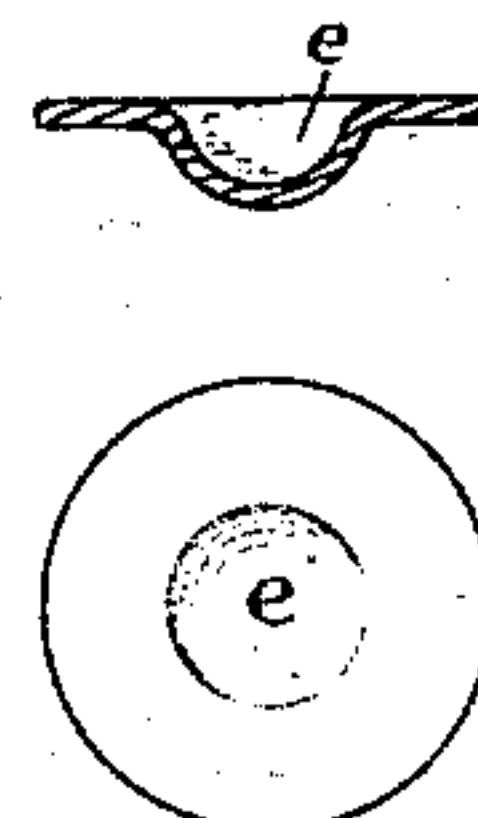


Fig-3-

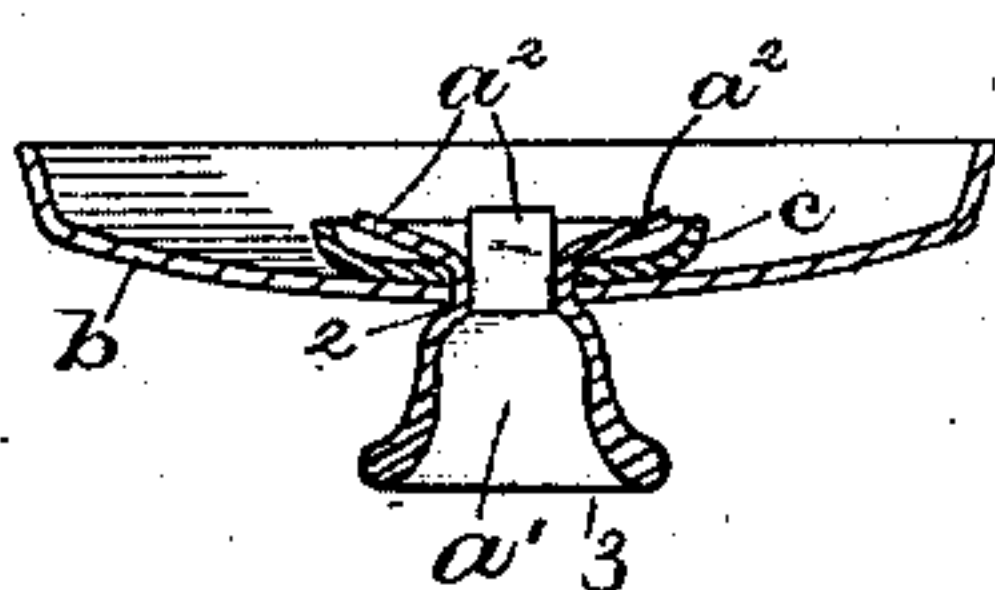


Fig-4-

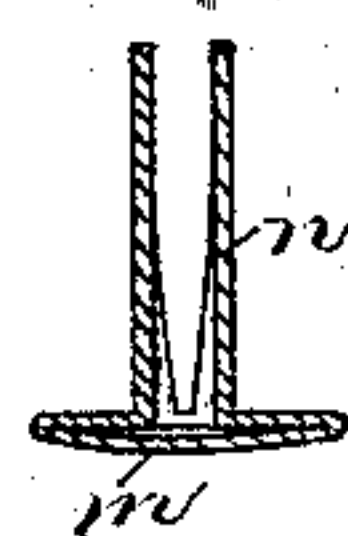
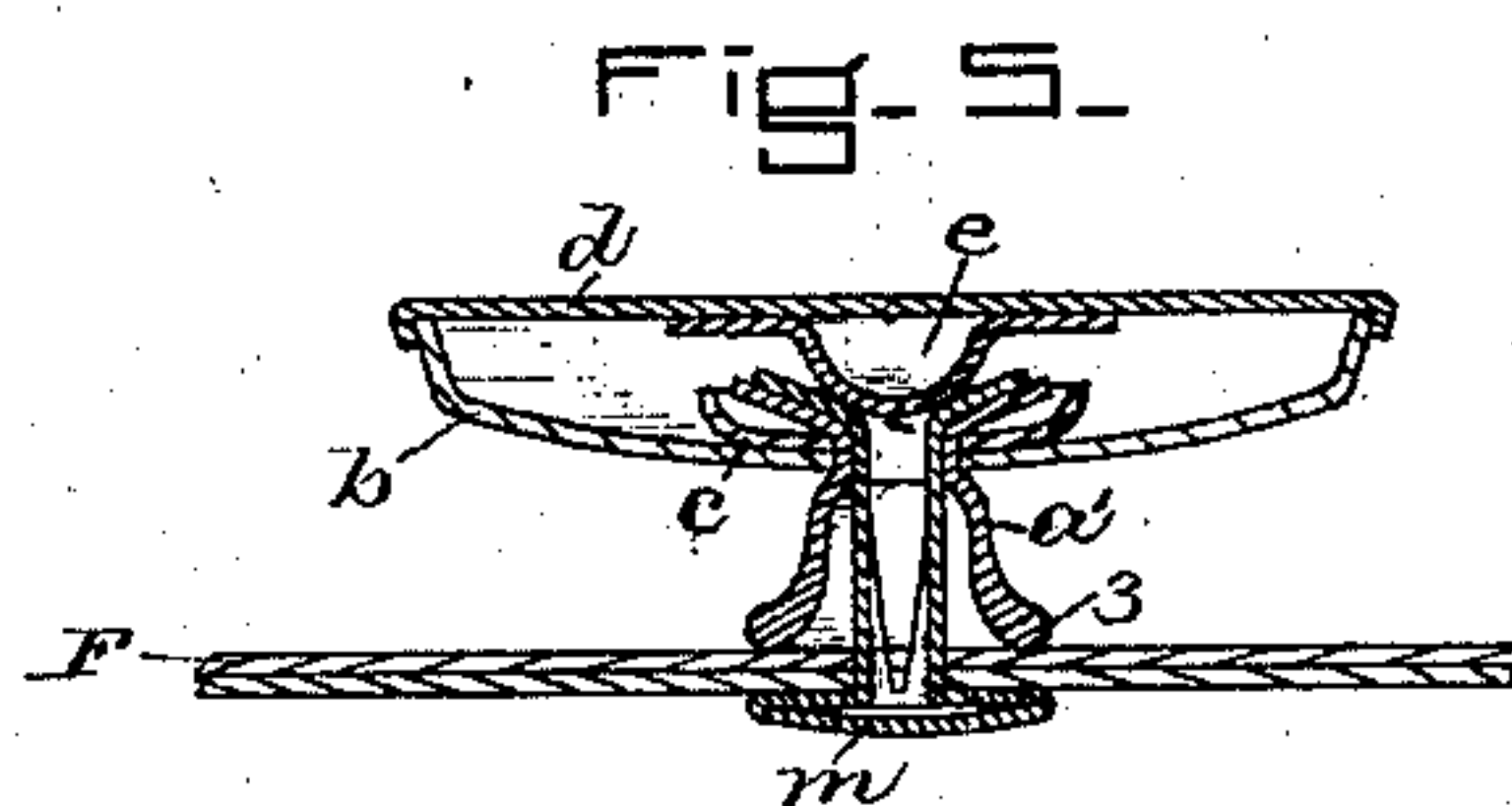
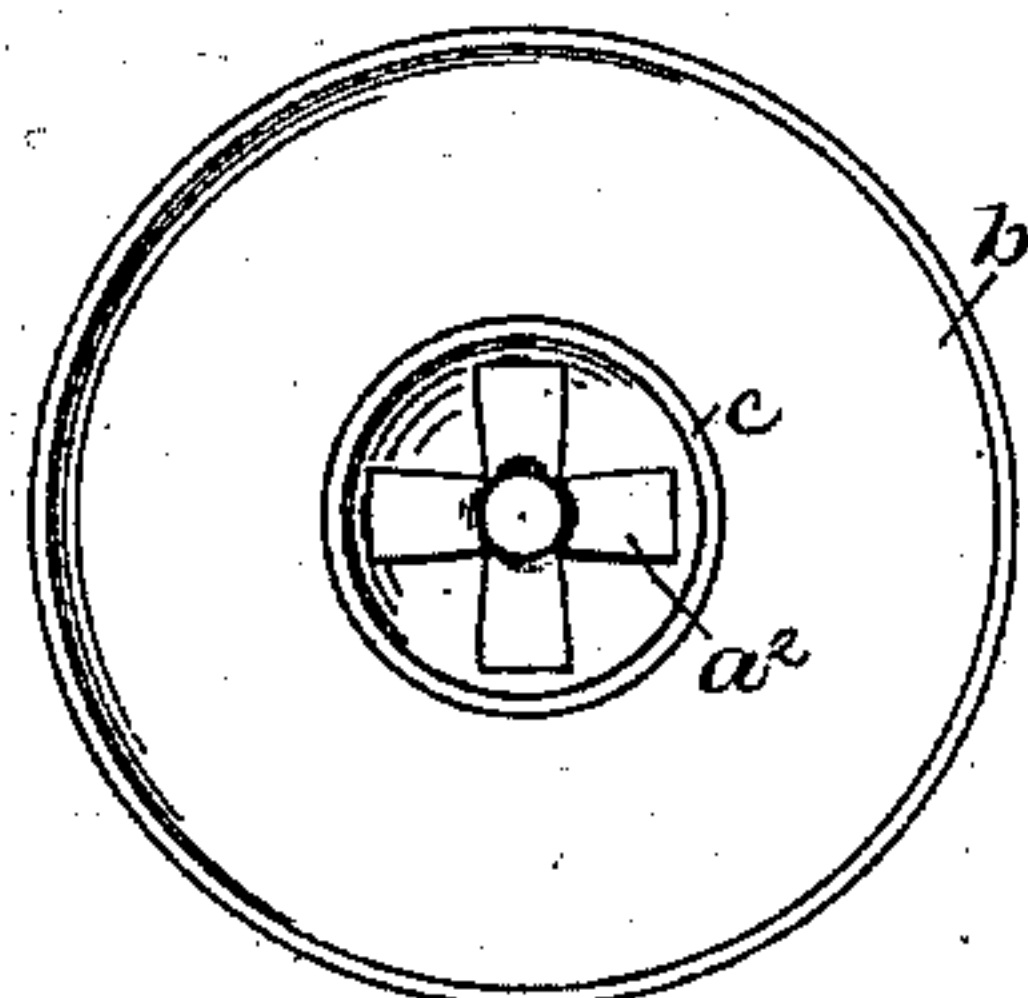
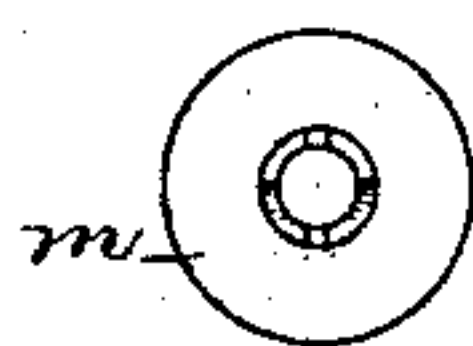


Fig-6-



WITNESSES

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UNITED STATES PATENT OFFICE.

SAMUEL W. SHOREY, OF BOSTON, MASSACHUSETTS.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 283,032, dated August 14, 1883.

Application filed April 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. SHOREY, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Buttons, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relating to buttons is embodied in a button of the class in which the head or main portion of the button is provided with a hollow shank or foot to rest on one side of the fabric, to which the button is fastened by a metallic fastening or rivet inserted from the other side of the fabric and upset or headed by an upsetting device or anvil within the body of the button. In buttons of this class the shank has heretofore commonly been made of a piece of metal drawn to the proper form, and an exceedingly ductile material is required, brass of the desired quality usually being employed, and such brass being very expensive.

My invention has for its object chiefly to reduce the cost of the button without impairing its quality; and it consists, mainly, in making the shank from a blank of metal, which is subsequently bent to the desired form in suitable dies, the metal employed for this purpose not requiring any great degree of ductility, so that a comparatively cheap metal—such, for instance, as scraps of ordinary tinned iron—may be employed.

The process of forming the blank into the shank is generally of even less expense than that of drawing the shanks as heretofore made, and a saving is consequently made of more than the difference in cost of material, which, when large quantities are used, is of considerable amount.

The invention also consists in a button having a shank made by striking or forming a blank in dies, as described, and provided with an upsetting surface or anvil combined with a metallic fastening, by which it is attached to the fabric.

Figure 1 is a plan view or diagram of the blank employed for making the shank; Fig. 2, a longitudinal section and plan view of the finished shank; Fig. 3, a transverse section and plan view of the anvil-piece for upsetting the metallic fastening; Fig. 4, a vertical sec-

tion and plan view of the shank and lower portion of the button attached thereto. Fig. 5, a longitudinal section of the complete button attached to the fabric by a suitable metallic fastening, and Fig. 6 a longitudinal section and plan view of the fastening employed.

The main portion *a* of the blank for forming the shank, which may be stamped from sheet metal, consists of a series of arms, which, when bent substantially at right angles to the plane of the blank, will form the hollow or tubular shank *a'* of the button, (see Fig. 2,) the edges of the said arms meeting so as to form a practically continuous surface. The said arms *a* have narrower extensions *a''*, which, in the finished shank, form a tubular extension, *a'''*, of smaller diameter than the main portion *a'* of the shank, a shoulder, 2, thus being formed at the junction of the said main portion *a'* and tubular extension *a'''*.

The main portion *a* of the blank has an opening, *a''*, in its middle, the said opening being of such form as to produce a series of inwardly-projecting tongues, *a'''*, which are turned up in the interior of the completed shank, as shown in Fig. 2, the foot or lower end, 3, of which thus has a rounded edge produced by a fold in the metal, instead of the rough edge produced by a single thickness of metal. The said tongues *a'''* are opposite to the angles formed between the arms *a*, and thus cover the points of junction 4 (see Fig. 2) of the arms *a* of the shank, and prevent it from breaking apart on the said lines of division 4, the foot or rim 3 being of continuous metal.

The lower part, *b*, of the head or main part of the button has an opening of proper size to receive the tubular extension *a'''* of the shank, and when placed thereon the said main portion *b* of the button rests upon the shoulder 2 of the shank, as shown in Fig. 4, and is then securely fastened to the said shank by opening out the said tubular portion *a'''*, and thus separating the arms or projecting portion *a''*, of which the said tubular extension is composed.

As shown in the drawings, a metallic washer, *c*, is interposed between the bottom portion, *b*, of the button and the fingers *a''*, by which the shank *a'* is fastened thereon. The button is finished by having a top portion, *d*, attached to the said bottom portion, *b*, as

shown in Fig. 5, the said top portion either being itself shaped to produce an anvil or having an anvil-piece, *e*, attached to it, the said anvil-piece consisting, essentially, of a projection having its convex side opposite the upper end of the tubular shank *a'*, so that a metallic fastening, having a malleable point or end, when forced through the said shank *a'*, will have its end deflected upon the said anvil, so as to engage the interior of the lower portion, *b*, of the button, or the washer *c* or the holding-fingers *a''* of the shank thereon. Such a metallic fastening is shown in Figs. 5 and 6 as consisting of a rivet having a head, *m*, to engage the fabric *F* opposite to the foot 3 of the button-shank, and a stem, *n*, substantially tubular near the said head *m*, but having portions of its end removed to form prongs, (shown in this instance as two in number,) the said prongs readily piercing the fabric *f* and being bent over, as shown in Fig. 5, by the anvil-piece *e*, connected with the top *d* of the button, to thus engage the interior of the but-

ton at the top of the shank and securely fasten it to the fabric. 25

I claim—

1. As an improved article of manufacture, a struck-up tubular button-shank, having a continuous annular foot and tubular shank composed of separate arms or portions extending from the said foot in contact with one another, and adapted to engage the body of the button, substantially as described. 30

2. The blank composed of the arms *a* and extension *a''*, and having an opening at its middle, whereby a tubular or hollow shank is produced, having a foot with a rounded edge made by a fold in the metal, substantially as described. 35

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 40

SAMUEL W. SHOREY.

Witnesses:

JOS. P. LIVERMORE,
BERNICE J. NOYES.