

(No Model.)

C. RADCLIFFE.

BUTTON.

No. 303,047.

Patented Aug. 5, 1884.

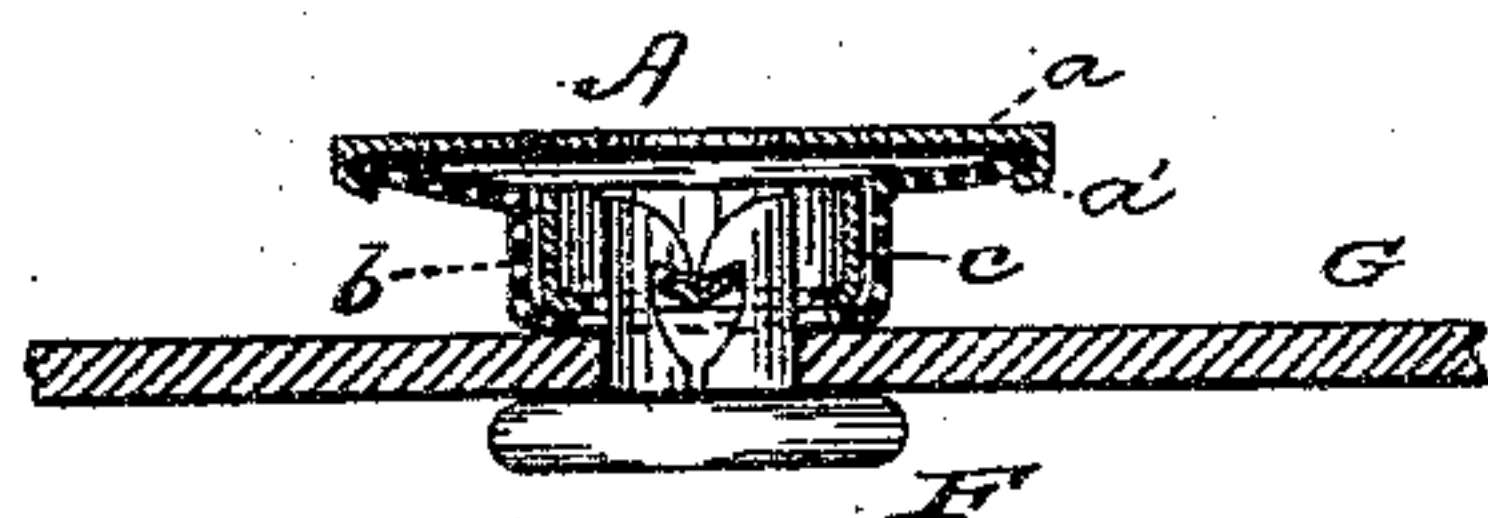


Fig. 1

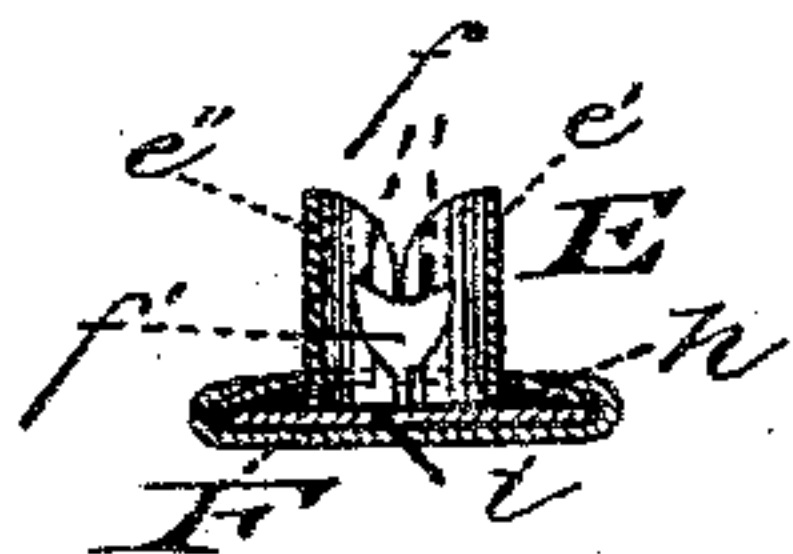


Fig. 2

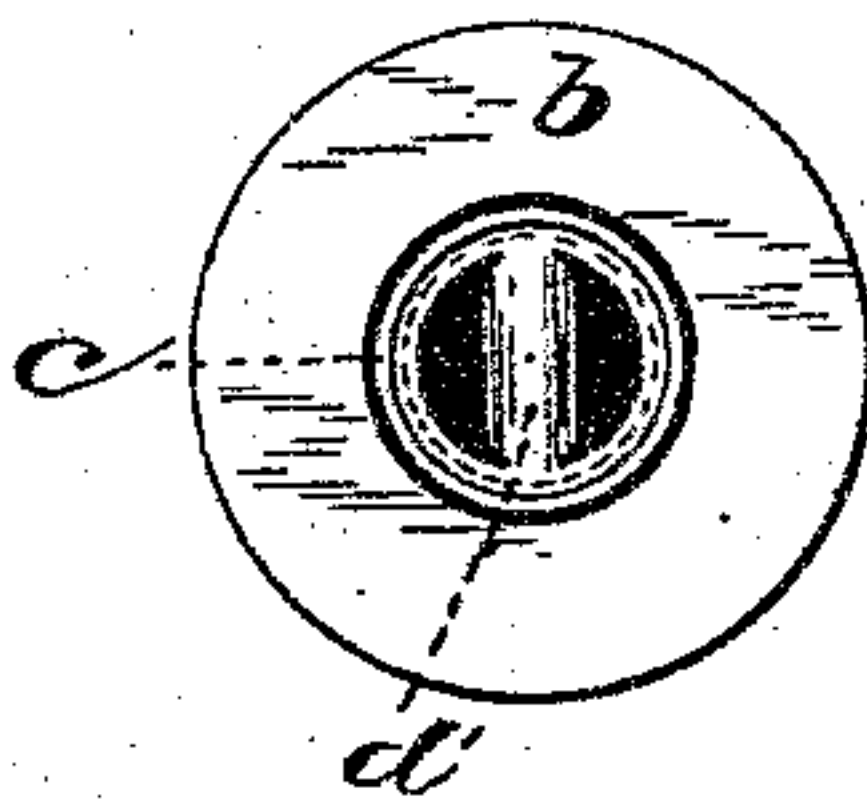


Fig. 3.

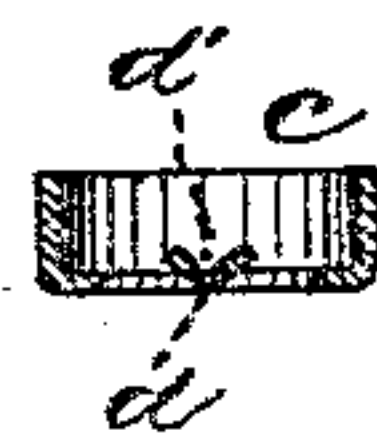


Fig. 2.

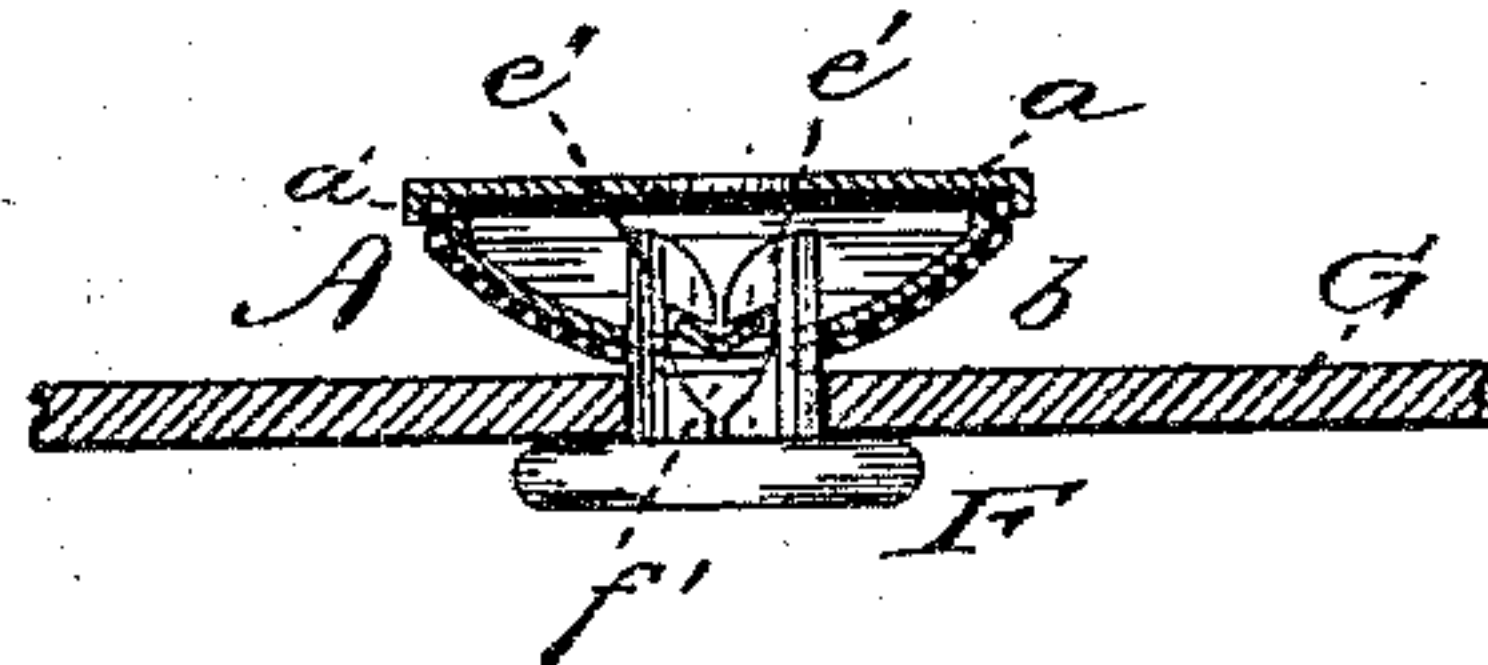


Fig. 5.

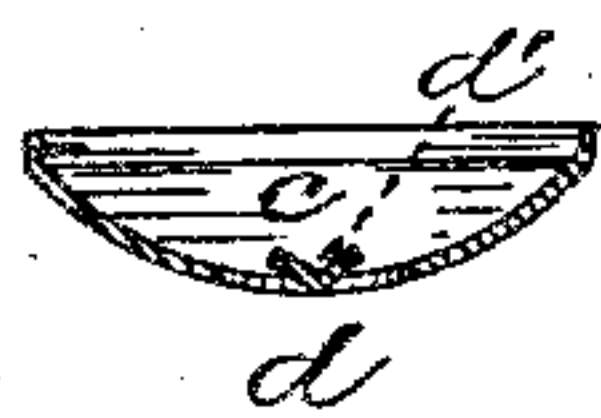


Fig. 6.

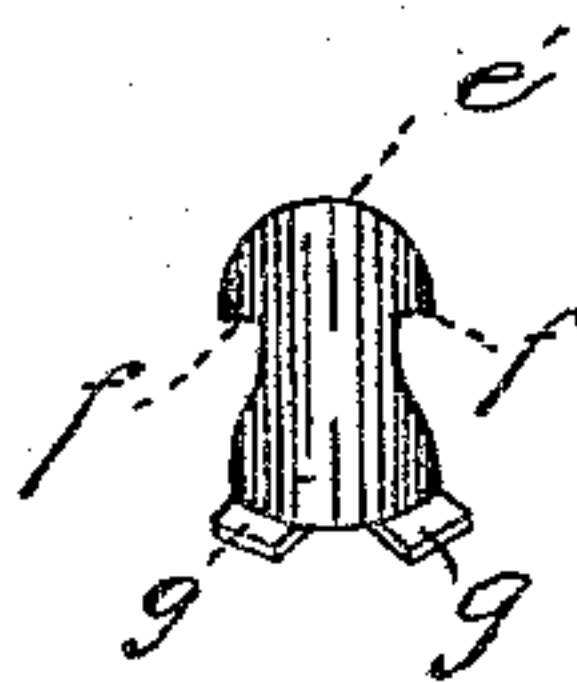


Fig. 8.

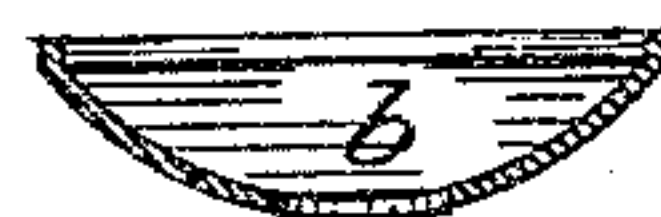


Fig. 7.

Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES RADCLIFFE, OF NEWARK, NEW JERSEY.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 303,047, dated August 5, 1884.

Application filed June 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES RADCLIFFE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in buttons adapted to be secured upon cloth or other fabric by other means than by sewing, one form of which was shown in Letters Patent No. 269,323, granted to me December 19, 1882, and is intended to provide a button of increased strength and utility, possessing advantages which will be hereinafter more fully described.

The invention consists in the arrangement and operation of the various parts of the invention, as illustrated in the drawings, described hereinafter and finally embodied in the claims.

In the drawings accompanying this specification, Figure 1 is a vertical section of a button, &c., partly in elevation. Figs. 2 and 4 are vertical sections of the hooked shank and rotating piece, respectively. Fig. 3 is a plan of the button-back and rotating piece. Fig. 5 is a view similar to Fig. 1, showing modified forms of some of the parts. Figs. 6 and 7 are sectional detail views of said modified forms shown in Fig. 5, and Fig. 8 is an elevation of one part of the hooked shank.

Similar letters of reference indicate like parts in each of the several figures.

As indicated in the figures of the drawings above described, my invention consists of a button, A, which is composed of the face-plate or cover *a*, secured to the back-plate *b* by the over or under lapping edges *a'*, and a rotating piece, *c*, arranged between said face and back plates, and free to revolve therein.

Integral with the rotating piece *c*, or separate therefrom, if desirable, is a bar, *d*, arranged centrally across an opening in the said

rotating piece, which, as is shown more clearly in Figs. 1, 3, 5, and 6, is of a peculiar shape, being triangular in outline, with a depression, *d'*, in the top or upper side. When the cross-bar is integral with the rotating piece, the said depression is formed as the said piece is stamped out by turning up the sides of the cross-bar, as will be readily understood by those skilled in the art. The back-plate *b* has an opening therein corresponding to the opening in the rotating piece, but without a cross-bar. The said back-plate may have a central recess or depression to receive the rotating piece, as in Figs. 1 and 3, or may be bowl-shaped, as in Figs. 5, 6, and 7, or otherwise formed; or the face-plate may contain the recess for the rotating piece, the intention being to provide enough room between the two plates to contain the rotating piece and the entering parts, and also to permit the free revolution of said rotating piece therein. I may further dispense with the face-plate entirely should I desire it, but prefer ordinarily to employ it.

To secure the button above described to the fabric, I employ a hook-shank, E, provided with a disk, F, which serves to hold the button upon the goods. The said hook-shank is composed, preferably, of two parts, *e'* *e''*, rounded on the top, the hook parts thereof being undercut, forming the bar-opening *f'* therebetween, as shown in Figs. 1, 2, and 5. Said hook parts are provided with lugs *g*, Fig. 8, which lie under the plate *h*, Fig. 2, and rest upon the filling *i*, made, preferably, of paste-board, and the whole incased in the shell or disk F. This construction of the shank permits the said hook parts to spring apart when the cross-bar is forced between them, and to return to their normal close position when the bar has passed between them into the bar-opening.

In securing the button to the fabric, (lettered G in the drawings,) I first make a puncture therethrough and insert the hook-shank and press the button down upon the same. The bar of the button enters between the two parts of the hook-shank, pressing them apart, and the hook parts thereof spring together and catch on the upper side of the bar in the depression, and prevent the separation of the

parts—*i. e.*, the button and the shank. The more strain to which they are subjected only serves to hold them more firmly together by reason of the undercut hooks *f* engaging with the depression *d'*, as shown in Figs. 1 and 5.

The button may be made of any suitable material, as metal, composition, wood, &c., or may be covered with cloth or ornamented, as desired. By this arrangement of the parts a button of great strength is secured, one easily adjusted without any complicated operations, and by reason of its swivel or rotating action greatly relieves the strain upon the fabric to which it is secured.

Having thus described my invention, what I claim as new is—

1. In a self-fastening button, the combination, with a recessed plate, as *b*, provided with a central perforation, a rotating piece having a perforation corresponding to that in the recessed plate, and a cross-bar arranged within said recessed plate, of a hooked shank adapted to pass through the fabric to which the button is secured and enter the perforations in the said plate and piece and catch upon the cross-bar, for the purpose set forth.

2. In combination, in a self-fastening button, a back-plate having a perforation therein, a

face-plate secured upon said back-plate, a rotating piece arranged between said face and back plates, provided with a perforation corresponding to that in the back-plate, and a cross-bar across said opening, a hooked shank provided with a disk or shell and adapted to enter the openings in the back-plate, and rotating piece and catch upon the said cross-bar, for the purpose set forth.

3. A self-fastening button consisting of a recessed plate having a central opening, a rotating piece arranged within said recessed plate, provided with a cross-bar integral therewith, having a depression on the upper side, for the purpose set forth, and arranged across a central opening in said piece corresponding to that in the recessed plate, and a hook-shank adapted to enter the openings in the plate and piece and catch upon said cross-bar, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of May, 1884.

C. RADCLIFFE.

Witnesses:

F. F. CAMPBELL,
CHARLES H. PELL.