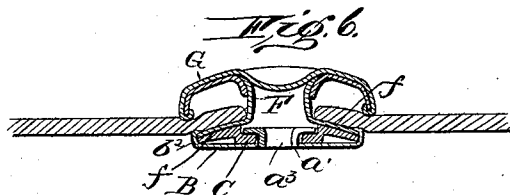
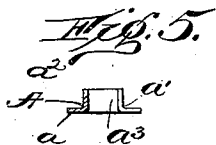
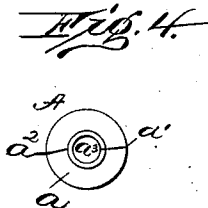
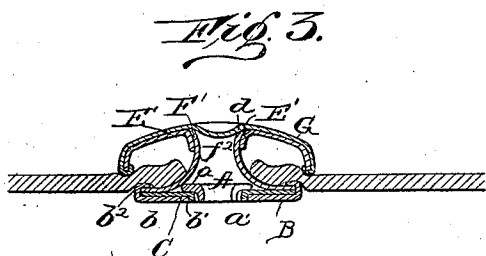
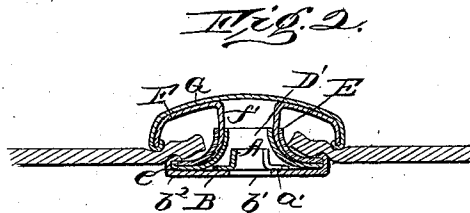
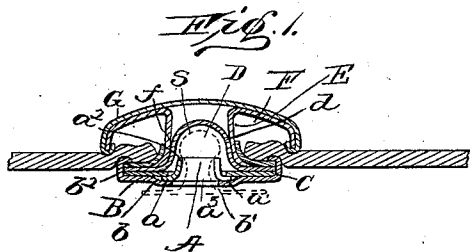


(No Model.)

E. PRINGLE.
SEPARABLE BUTTON.

No. 574,267.

Patented Dec. 29, 1896.



Witnesses:
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UNITED STATES PATENT OFFICE.

EUGENE PRINGLE, OF GLOVERSVILLE, NEW YORK, ASSIGNOR TO MADISON D. SHIPMAN AND CHARLES E. BRADT, OF DE KALB, ILLINOIS.

SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 574,267, dated December 29, 1896.

Application filed September 8, 1888. Serial No. 284,945. (No model.)

To all whom it may concern:

Be it known that I, EUGENE PRINGLE, a citizen of the United States, residing at Gloversville, in the county of Fulton and State of New York, have invented certain new and useful Improvements in Separable Buttons, of which the following is a specification.

My invention relates to separable buttons; and it consists in the parts and devices and combinations of parts and devices hereinafter particularly described, and specifically set forth in the claims.

The objects of my invention are, first, to provide in a button-head of a separable button an elastic tubular-form stud-catch and devices for holding this stud-catch securely united with the other parts of the button-head; second, to provide particular combinations of devices whereby the button-head will be closed and the closing-shell will be attached to the fabric and united with the stud-holding device, and, third, to provide particular combinations of parts or devices by which this invention can be embodied in the button-heads of separable buttons. I attain these objects by the means illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a sectional elevation of a button-head embodying the features of this invention with the coating stud indicated by dotted lines. Fig. 2 is a sectional elevation of the same with some of its parts modified in form and containing fewer pieces than that shown in Fig. 1. Fig. 3 is a sectional elevation of the button-head with some of the parts modified in form and showing a less number of parts than employed in Figs. 1 and 2. Fig. 4 is a plan view of the elastic tubular-form stud-catch. Fig. 5 is a sectional elevation of the same. Fig. 6 is a sectional view of a button-head having some of its parts made with a modified form for holding the stud-catch in connection with the button-head proper.

The same letters of reference refer to like parts throughout the several views.

In the drawings, A is a tubular form of stud-catch having flange *a* as a means for holding the catch in place within the button-head. This tubular stud-catch is slitted from

top to bottom and through its flange *a* by slit *a'*, so as to make its wall *a*² elastic and capable of being expanded by the pressure of the head of the stud when the latter is being passed through the bore *a*³ in either direction. This elastic stud-catch is secured in place in the button-head by its flange *a* being held with a supporting-piece at the lower side of said flange and a lightly-pressing holding-piece bearing on the upper side of flange *a*, as in Fig. 1, or its upper-margin corner, as shown in Figs. 2 and 3. In Fig. 1 this stud-catch is shown to be supported by piece B, in which piece is made a shallow recess *b*, which recess is concentric to the central aperture *b* for the passage of the stud S. This recess *b* in piece B, Fig. 1, is made with a depth about equal to that of the flange *a* of the stud-catch A, so as to receive the same. In Fig. 2 this recess *b* is shown to be omitted, and when omitted the flange *a* of the stud-catch A will rest on the edge margin of piece B, surrounding the aperture *b'*, as shown in Fig. 2. This stud-catch-supporting piece B is shown to be provided with a binding-flange *b*² for holding it with the coating parts of the button-head with which this piece B is to be attached.

C is a stud-catch-holding piece which can be employed in the button-head constructed as shown in Fig. 1, and it consists of a small disk having a central aperture *c* for loosely receiving the tubular portion *a*² of the stud-catch A, as shown, and when this piece C is employed for holding the stud-catch in place it will be preferably held down by the eyelet-turning piece D, bearing on its upper side, as shown in Fig. 1. In Figs. 2 and 3 this form of stud-catch-holding piece C is shown to be omitted and a modified form of eyelet-spreading piece D' (shown in Fig. 2) is employed in lieu of the eyelet-spreading piece D, (shown in Fig. 1,) and in this case the eyelet-spreading piece D', Fig. 2, is made to have bearing on the upper corner or outer edge margin of flange *a* of the stud-catch A, so as to hold this stud-catch in place from shifting laterally in relation to aperture *b'* or being lifted upwardly when the head of the stud is being passed through said stud-catch.

E, Figs. 1 and 2, is an eyelet-holding piece secured with the stud-catch-supporting piece

B, and preferably by the annular rim-flange b^2 , clenching all around the outer margin edge e of this eyelet-holding piece E when in place opposite the inclined wall d of the spreading-piece D, as in Fig. 1, or D', as in Fig. 2.

F is the fastening-eyelet, having its flange-head f preferably made with a shell form and corresponding with the interior side surface of the outer shell or cap E, as shown in Figs. 1 and 2. This eyelet F is preferably held within the shell G by the lower margin edge of the latter clenching on the lower margin edge of the former, as shown in Figs. 1 and 2. When the lower half portion of this button-head is to be united with the upper half portion of the same and made to clamp the material between the tubular portion f' , the eyelet will be forced down into the joint between the eyelet-turning piece D or D' and the eyelet-holding piece E and be spread outwardly and made to engage with the eyelet-holding piece E from its inner side, as shown in Figs. 1 and 2.

In Figs. 1 and 2 the stud-catches are shown to be made and arranged with their flanges a downward; yet, if preferred, this stud-catch can be made with its flange a above with the tubular portion a^2 projecting downwardly through the aperture b' made in the stud-catch-supporting piece B, constructed as shown in Fig. 3. Fig. 3 also shows the fastening-eyelet F to be inverted and as having its flange f resting on the upper side of the stud-catch-supporting piece B, with its tubular portion f' projecting upwardly for engaging with the eyelet-holding piece E'. Fig. 3, as portion f' is spread outwardly by operation with the incline d' , made with the outer shell G, as shown in Fig. 3.

If preferred, the stud-catch-supporting piece B can be made substantially as shown in Fig. 6 and be employed with the fastening-eyelet F and a binding-piece B, clenching with the upper side of the flange f of the inverted eyelet F, (shown in said Fig. 6,) or the stud-catch-supporting piece B (shown in Figs. 3 and 6) can have made with them clenching margin-rims, substantially as have pieces B and D, Figs. 1 and 2, or the flange of the eyelet can be provided with a clenching-rim, which can be clenching on the outer edge margin of piece B.

The stud S, indicated by dotted lines in Fig. 1, is made to have its head of diameter slightly larger than the diameter of the bore of the stud-catch, as shown, while the diameter of its neck portion will be relatively smaller, and when the neck of the stud is passed upwardly through the stud-catch A it

will expand the latter until it has fully passed through its bore, when its wall will engage with the neck of the stud and securely hold it until purposely removed.

By my above-described improvements the button-head can be readily constructed from pieces which are readily assembled and secured and are not liable to disarrangement, and the upper and lower portions of the button-head can be readily secured together and with the fabric with which they are to be held by means of a suitable instrument.

Having described my invention, what I claim is—

1. A head for separable buttons, consisting of a cap-plate, a fastening-eyelet therefor, a centrally-apertured plate secured by the fastening-eyelet to the opposite side of the material, and a stud-catch formed from an eyelet slitted through its tubular and flanged portion, and held within the head in alignment with the aperture of the plate, substantially as described.

2. A head for separable buttons consisting of a cap-plate and a fastening-eyelet therefor, a holding-piece for said eyelet, a slitted eyelet to catch the stud, said eyelet having a base-flange supported upon a centrally-apertured plate on the under side of the material or fabric, substantially as described.

3. In a separable button the combination of a single-flanged slitted stud-catch A, a catch-retaining piece B, a plate C, secured together and forming the lower or under side portion of the button-head, with a cap as G, and a doubly-flanged fastening-eyelet as F, adapted with its two flanges, to hold the upper and lower portions of said button-head to the fabric, substantially as and for the purpose set forth.

4. In a separable button-head, the combination of the single-flanged slitted tubular stud-catch A, the pieces B and D' clamping the base of said catch at one side of the fabric, the piece E seated above the piece D', and projected through the fabric, the shell G, having an inwardly-turned periphery seated against the opposite side of the fabric, and the eyelet-tube F, having its outer upper edge seated in said curved periphery of said shell G, and its outwardly-flanged base forced outwardly between the pieces E and D', substantially as shown and for the purpose described.

EUGENE PRINGLE.

Witnesses:

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