

Jan. 19, 1926.

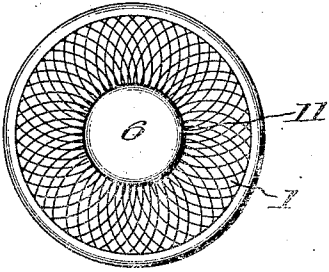
F. E. WARNER

BACHELOR BUTTON

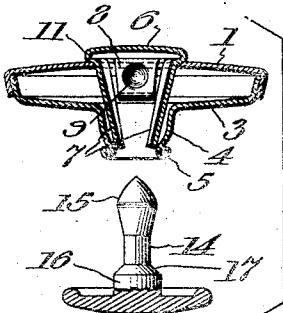
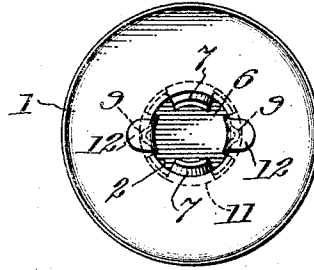
Filed Jan. 5, 1925

1,570,362

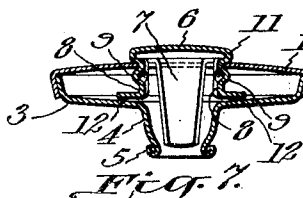
*Fig. 1.*



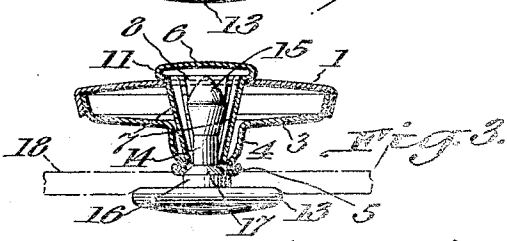
*Fig. 6.*



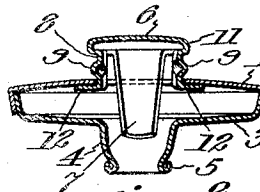
*Fig. 2.*



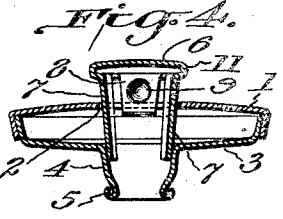
*Fig. 7.*



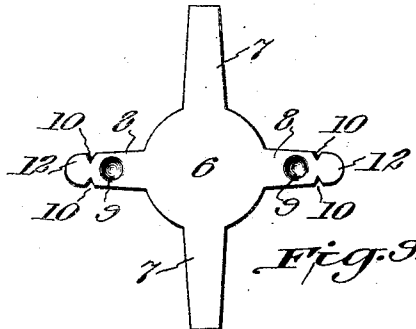
*Fig. 3.*



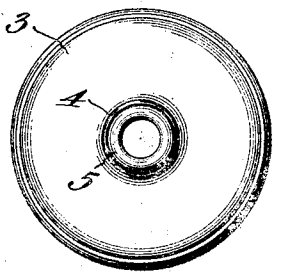
*Fig. 8.*



*Fig. 4.*



*Fig. 9.*



*Fig. 5.*

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Attorney.

## UNITED STATES PATENT OFFICE.

FRANK E. WARNER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

## BACHELOR BUTTON.

Application filed January 5, 1925. Serial No. 632.

*To all whom it may concern:*

Be it known that I, FRANK E. WARNER, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Bachelor Buttons, of which the following is a full, clear, and exact description.

Buttons known in the trade as "bachelor buttons" are characterized by the fact that they may be attached to a garment without sewing. Mechanically they comprise a head containing means to engage, either fixedly or separably, a tack-like fastener which is forced through the garment and into the head.

The bachelor button of the present invention is of the separable type, and the invention consists, first, in the means, hereinafter referred to as a clutch, carried by the head and movable axially in it for separably engaging the tack, and second, of a tack provided with means, hereinafter referred to as a collar, to limit its extent of movement into the head and thus prevent accidental separation of the button head from its fastening tack, as I will proceed now to explain and finally claim.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a top plan view of the head. Fig. 2 shows in cross section the head with the tack-engaging device in engaging position and the tack with its head in cross-section and its shank in elevation. Fig. 3 is a cross-section of the head and the tack in elevation as the two would appear when engaged. Fig. 4 is a cross-section of the head with the tack-engaging device in tack-releasing position. Fig. 5 is a bottom plan view of the head. Fig. 6 is a plan view of the interior of the cap of the head. Fig. 7 is a cross-section of the head taken at right angles to the cross-sections shown in Figs. 2, 3 and 4 and with the tack-engaging device in engaged position. Fig. 8 is a view similar to Fig. 7 but with the tack-engaging device in tack-releasing position. Fig. 9 is a plan view of the blank from which the tack-engaging device or clutch is formed.

Obviously, all of the views show the parts in enlarged or exaggerated form.

Bachelor buttons of the separable type are

especially useful on garments where it is desirable or necessary to change the positions of the buttons, and such buttons have the further advantage of being capable of repeated use on the same or other garments.

The button-head, excepting as hereinafter explained, may be of any usual or approved construction and material, and is here shown as a trousers button, composed of a cap 1 of ornamental or other finish, having a central aperture or perforation 2, and a collet or back 3 having the hub 4 with a constricted and rolled end 5. As shown, the cap may be flanged over the collet, as usual, to unite these parts.

The means for separably engaging the tack or fastener is made from a blank, such as shown in Fig. 9, with a central solid portion 6, from which radiate fingers 7 which may be made more or less convex, as shown in Figs. 2 and 8, inclusive, to clasp the shank of the tack. This blank also has the radiating fingers 8 provided with the prick-points 9 and the notches 10. This blank is stamped or drawn up so that the central solid portion 6 forms a cap with a circumferential rim 11 which may be readily grasped by the user's fingers or finger-nails to lift the device from the position shown in Figs. 2 and 3, or Fig. 7 to the position shown in Fig. 4 or Fig. 8. The fingers 7 and 8 are bent at an angle to the cap and entered into the button-head through the aperture 2 therein, the fingers 7 extending down into the hub and the fingers 8 extending only into the space between the cap and collet and having their tips 12 bent outwardly at right angles so as to come into contact with the inside surface of the cap 1 to prevent the escape of the device from the button-head.

The prick-points 9 will also engage the inside edges of the cap adjacent to the aperture 2 when the device is in the tack-engaging position, as shown in Figs. 2, 3 and 7, and these same prick-points pass outside of the aperture 2 in the cap when the device is withdrawn from engagement with the tack, as shown in Figs. 4 and 8, and may be utilized to hold the device in position for application of the head to the tack. There is more or less resilience in the fingers 8, and this permits them to yield sufficiently for the described movements of the prick-points 9 on said fingers 8.

The device just described as formed from the blank of Fig. 9, is herein referred to as a clutch, by reason of its function now to be described.

- 5 The fastening device shown in Figs. 2 and 3, comprises a head 13 provided with a shank 14 having a double conical point 15 and the collar 16 located at the base of the shank and adjacent to the tack head. The point  
10 15 is usually made of sufficient sharpness to penetrate an ordinary garment without the necessity of punching a hole in the garment for it.

- The point 15 has its greatest diameter  
15 only sufficiently less than the entrance end 5 of the hub 4 of the button-head to permit the free passage of the point into and out of the button. When the button-head and tack are to be connected, the clutch is moved  
20 from a position such as shown in Figs. 2, 3 and 7, wherein the extremities of the fingers 7 are in contact with the restricted end of the hub, into a position above such restricted end, such as shown in Figs. 4 and 8,  
25 so that the fingers 7 may expand or diverge in order to permit the free entrance of the point of the tack into the button through its hub, and then the clutch is pushed into the button until the tips of the fingers 7  
30 pass below the point 15 of the tack and into the constricted region of the hub, so as to grasp the shank of the hub below its point and hold the button-head and tack in secure engagement.

- 35 The engagement of the prick-points 9 with the adjacent edge of the aperture 2 in the cap prevents accidental disengagement of the clutch from the tack.

- The collar 16 at the base of the shank of  
40 the tack, has the beveled upper surface 17 which aids in making the opening in the garment large enough for the reception of the collar, and this collar coming into contact with the end 5 of the hub limits the extent of entrance of the tack into the button-head, and particularly restrains the tack  
45 from contact with the inner surface of the cap of the clutch and so precludes any movement of the clutch that would serve to separate the button-head from the tack.  
50

- Fig. 3 shows the button-head and tack assembled with the garment or other article, indicated by the dotted lines 18, to which the parts are attached as intervening between  
55 the end 5 of the button-head and the head 13 of the tack, and consequently shows the relation of these parts normal with respect to their position when in actual use on a garment or other article.

- 60 The construction of the clutch with the fingers 8 arranged and operating as de-

scribed, makes unnecessary any cross-bars in the cap and permits the manufacturing economy of a single central aperture 2 in the cap. These fingers in their relation to the  
65 cap prevent the loss or accidental displacement of the clutch, and in addition tend to center the clutch for cooperation with the tack in the act of uniting the button-head and tack.  
70

Variations in the details of construction and the arrangement of parts are permissible within the principle of the invention and the scope of the claims following.

What I claim is:—

- 75 1. A bachelor button, of the separable type, having a button-head provided with a single central aperture, and an axially movable clutch arranged in said head and provided with resilient tack-engaging fingers,  
80 and also provided with other fingers engaging the head next to said aperture to permit longitudinal movement of the clutch and prevent its escape from the button-head.

- 85 2. A bachelor button, of the separable type, having a button-head provided with a single central aperture, and a collet provided with a hub having a constricted end, and a tack engaging and releasing clutch arranged in said aperture and having tack-engaging  
90 fingers adapted to extend down into the hub and into contact with the constricted end of the hub, and also having other fingers adapted to engage the head next to said aperture.  
95

3. A bachelor button, of the separable type, having a button-head provided with a single central aperture, a collet having an end-constricted hub, a tack-engaging clutch mounted in said aperture and having resilient  
100 fingers extending into the button-head and into engagement with the constricted end of the hub, and other resilient fingers having outwardly bent tips serving as stops against the outward escape of the clutch  
105 from the button-head and provided with prick-points arranged between said stops and the outer portion of the clutch and adapted to engage the edge of the aperture.

4. A bachelor button, of the separable  
110 type, having a button-head provided with an axially movable tack-engaging clutch, and a collet having a hub, combined with a tack having a head and a shank, and a collar on said shank next to the head adapted  
115 to cooperate with the end of the hub to prevent interference of the tack with the operation of the clutch.

In testimony whereof I have hereunto set my hand this 1 day of Jan. A. D. 1925.

FRANK E. WARNER

**Certificate of Correction.**

It is hereby certified that in Letters Patent No. 1,570,362, granted January 19, 1926, upon the application of Frank E. Warner, of Waterbury, Connecticut, for an improvement in "Bachelor Buttons," an error appears in the printed specifications requiring correction as follows: Page 1, line 75, for the word "and" read *to*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 9th day of February, A. D. 1926.

[SEAL.]

WM. A. KINNAN,  
*Acting Commissioner of Patents.*