

April 20, 1926.

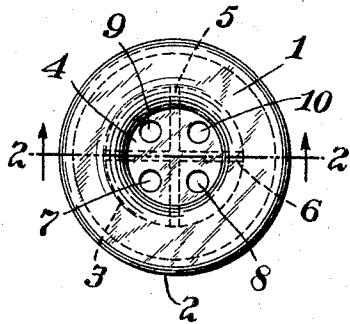
1,581,707

F. R. WHITE

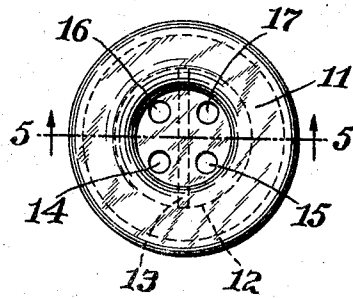
FOUR-HOLE BUTTON

Filed Nov. 16, 1925

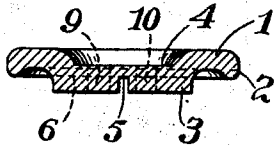
*Fig. 1.*



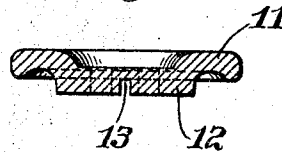
*Fig. 4.*



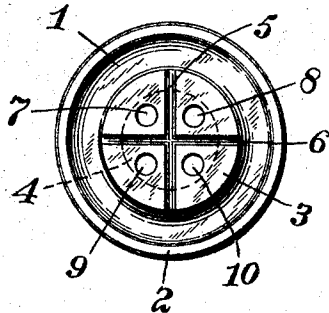
*Fig. 2.*



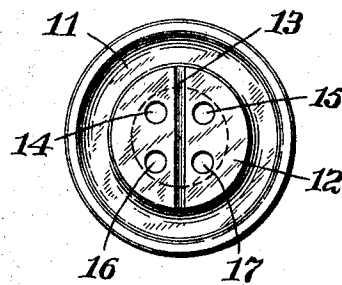
*Fig. 5.*



*Fig. 3.*



*Fig. 6.*



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*by Parker Cook,*  
*Atty.*

# UNITED STATES PATENT OFFICE.

FRANKLIN R. WHITE, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE PATENT  
BUTTON COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CON-  
NECTICUT.

## FOUR-HOLE BUTTON.

Application filed November 16, 1925. Serial No. 69,319.

*To all whom it may concern:*

Be it known that I, FRANKLIN R. WHITE, a citizen of the United States of America, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Four-Hole Buttons, of which the following is a specification.

My invention relates to new and useful improvements in four hole buttons of the sew-on type, and has for an object to provide a button wherein the hub is so constructed that when the buttons are placed in an automatic button sewing machine, the buttons will be properly guided and controlled in their movement until they are grasped or otherwise held under the needle or needles for the sewing-on action.

As is well known to those skilled in the art, it is necessary when sew-on buttons are used in automatic machinery to provide certain arrangements and mechanisms for properly centering the buttons beneath the needle or needles, so that the needle will properly register with the holes in the buttons, and this centering must be very accurate as if a needle does not register with a hole, it will, of course, break and put the machine out of order, and possibly injure the operator.

The present invention contemplates the arrangement of a four-hole button so that rather than centering the button after it has passed down to the needle, the button will be guided and controlled in its movement to the needle.

The present application is a companion to several others filed by me on November 16, 1925, bearing Serial Nos. 69,318; 69,320; 69,321 and 69,322.

With these and other objects in view, the invention consists in certain new and novel arrangements and combination of parts as will be hereinafter more fully described and pointed out in the claims.

Referring now to the drawings showing a preferred and a modified form,

Fig. 1 is a top plan view of the button, the dotted lines showing the grooves across the under surfaces of the hub.

Fig. 2 is a sectional view taken on line 2—2 of the same.

Fig. 3 is a bottom or rear plan view.

Fig. 4 is a top plan view of a slightly modified form of button.

Fig. 5 is a sectional view taken on line 5—5 of Fig. 4, and

Fig. 6 is a bottom plan, or view of the rear of the button.

Referring now more particularly to the preferred form, the button is shown as comprising a body portion 1, having the slightly downwardly extending rim 2 and a short hub 3. The body portion is centrally depressed as at 4, while on the undersurface of the hub is the one slot 5 extending completely across the hub and the further slot 6 which intersects or bisects the groove or slot 5.

In the circular hub are located the four holes 7, 8, 9 and 10. The location of these holes is important and it will be understood that the two grooves or slots 5 and 6 divide the undersurface of the hub into quadrants and if a line be drawn bisecting the opposite angles of two of the quadrants, this line will also pass through the centers of two of the holes.

With a button formed in this manner, the same may be placed in an automatic button sewing machine, and a guiding member (not shown) will allow the button to pass down a chute as soon as one of the guide members register with one of the grooves.

In this manner, the button will be properly guided during its passageway to the needle and there is no possibility of the holes not registering with the needles.

Referring now to the modified form, I have shown the button 11 having the hub 12 and the slot or groove 13 similar to the slot 5, but in this instance, only one slot is shown rather than two.

The location of the holes 14, 15, 16 and 17 are identical with the location of the holes 7, 8, 9 and 10 of the preferred form, so that if a line were drawn at right angles to the center of the groove, and further lines drawn bisecting the resulting angles, these lines would also register with the centers of the diagonally located holes.

This form differs from one of the forms of my co-pending application showing two holes and a groove, in that this is a four-hole button and the holes are located diagonally across from each other.

It will be understood that the button may be formed of metal, wood, bone or other like materials, and also its peripheral outline may be changed, the outline of the hub and the arrangement of the hole and the grooves being the gist of the invention.

Many slight changes might be made without in any way departing from the spirit and scope of the invention.

Having thus described the same, what I claim as new and desire to secure by Letters Patent is:—

1. A four hole sew-on button comprising a body portion, a centrally located hub, a groove extending across the under surface of the hub and two holes located on each side of said groove, and said groove adapted to guide and control the button when placed in a button sewing machine.

2. A four hole sew-on button comprising a body portion, two grooves formed on the under surface of said hub and bisecting each other to divide the undersurface of the hub into quadrants, each of said quadrants

provided with a hole, and the said holes in the diagonally opposite quadrants being diametrically opposite to each other.

3. A sew-on button comprising a body portion, a hub depending therefrom and provided with four holes therein, means extending across the hub and between the holes adapted to guide the button when placed in a button attaching machine, and to permit the button to assume any one of four positions when being guided in its movement.

4. A button of the sew-on type comprising a body portion, a hub, said hub provided with four holes therein, said hub being circular in outline, a depression formed in the hub and extending across the same and said depression extending between the holes to permit the button to assume either of two positions when being fed in an automatic machine.

In testimony whereof I affix my signature.

FRANKLIN R. WHITE.