Jan. 12, 1937. J. G. WOLFF 2,067,222

BUTTON OR THE LIKE

Filed Dec. 12, 1935

Fig. 1.



Fig. 4.

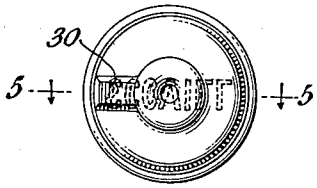


Fig. 6.

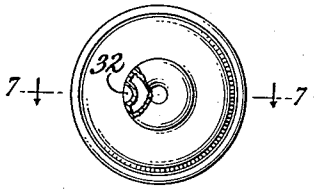


Fig. 2.

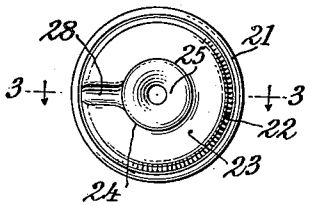


Fig. 5.

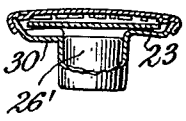


Fig. 7.

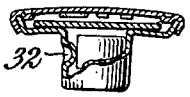


Fig. 3.

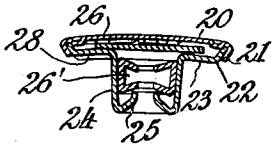


Fig. 8.

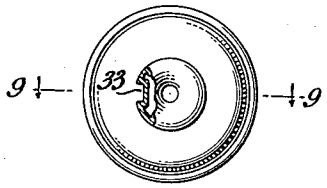


Fig. 10.

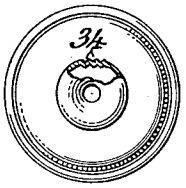


Fig. 14.



Fig. 9.

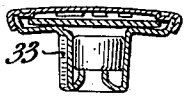


Fig. 11.

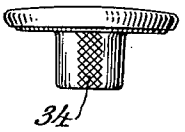


Fig. 12.

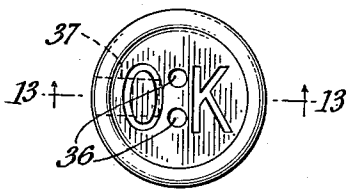


Fig. 13.



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UNITED STATES PATENT OFFICE

2,067,222

BUTTON OR THE LIKE

Jerome Ganierre Wolff, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut

Application December 12, 1935, Serial No. 54,049

10 Claims. (Cl. 40—20)

The present invention relates to buttons and the like which have a design, character or other ornamentation on their tops, and aims to provide certain improvements therein.

Heretofore it has been impossible to feed buttons having a design or ornamentation on their tops in automatic button feed mechanisms so as to definitely locate or position the design at the button-attaching station, whereby to insure attaching the button to a garment or other article with the design in desired position. To do this, of course, is highly desirable since it will thereby the possible for the design, which may be the manufacturer's trade mark on the buttons, to be always in correct position on the garments. Such proper positioning will not only enhance the appearance of the garment but will also enable others viewing the garment to read the trade mark on the buttons at a glance, thereby adding advertising value of benefit to the manufacturer.

The present invention has for its primary object the provision of buttons of various types having a design, ornamentation or trade mark, on their top adapted for use in button feeding and attaching machines, and so formed as to insure that the design or other ornamentation on the button top will always be in a definite position when the buttons reach the attaching station. To accomplish this I form the buttons with means which bears a definite relation to the design and adapted for cooperative action with means on the button-feeding mechanism for orienting the design so that it will always have a definite position when it reaches the attaching station. The means on the buttons which bears the definite relation to the design may take the form of a rib, groove, detent, knurl or the like, which is preferably located on the back, body or on the hub of the button, depending upon the type of button to which the invention is applied and the manner of attachment of such button to the garment or other article. Moreover, the orienting means on the buttons are preferably of such form as not to interfere with the use of the button after it has been attached to a garment or other article. The invention will be better understood from the detailed description which follows and from the accompanying drawing showing several embodiments, and wherein,

Figure 1 is a top plan view of a tack button having a trade mark thereon.

Fig. 2 is a bottom plan view of the button shown in Fig. 1,

Fig. 3 is a section taken substantially along the plane of the line 3—3 of Fig. 2 .

Figs. 4, 6, 8 and 10 are bottom plan views, some with parts broken away, showing further modifications of the invention.

Figs. 5, 7 and 9 are sections taken substantially along the planes of the lines 5—5, 7—7 and 9—9 of Figs. 4, 6 and 8, respectively, parts of the button being shown in elevation.

Fig. 11 is a side elevation of the button shown in Fig. 10.

Fig. 12 is a top plan view of a two hole sew-on button embodying the invention.

Fig. 13 is a section taken along the plane of the line 13—13 of Fig. 12.

Fig. 14 is a plan view showing the intended position of the button shown in Fig. 1 when applied to a fabric strap of a garment or other article.

Referring first to Figs. 1 to 3 of the drawing, I have shown the invention as applied to a conventional form of tack button, comprising a cap or shell 20, of generally circular configuration having an inturned marginal lip 21 engaging over a complemental upturned marginal lip 22 on a flange 23 extending outwardly from a cylindrical hub 24, the bottom of which has an inturned flange 25 defining an axial opening. The parts 22 to 25 may be said to constitute the body portion of the button. Mounted within the button between the cap 20 and flange 23 is an anvil plate 26, and disposed between said anvil plate and the inturned lip 25 is a filler element 26' having an axial opening therethrough in alignment with the opening through the flange 25. The cap or shell 20 on its top is provided with an ornamental design 27, herein shown as consisting of the words or trade mark "Scovill", the name of the assignee of this invention, disposed across the button in a straight line. Obviously, the design may consist of any word, characters, emblem or ornamentation, as desired. The tack button thus far described is merely by way of illustration and the invention is not limited thereto but has general application to any type of tack button, other button or other analogous device, as will presently appear.

According to the present invention the flange 23 may be rovided with a groove 28 formed by depressing a portion of the metal out of its normal plane or contour, which groove bears a definite relation to the design on the top of the shell, and as herein shown said groove extends along a radial line of the flange 23 and is made

to underlie the diametrical line along which the design 27 extends. It will be obvious, however, that the groove 28 may bear any other definite relation to the design, and which, when the button is fed down the usual button-feeding track or slideway of a button-feeding mchanism, will provide cooperative engagement with means on said mechanism (not shown) for engaging said button and causing it to assume a definite position, in which position it is presented to the button-attaching or setting station. The mechanism for positioning the design on this and the other types of buttons disclosed in the present application constitutes the subject-matter of an application of Henry Miller, Serial No. 64,897, filed February 20, 1936.

In Figs. 4 and 5 the means upon the button which bears a definite relation to the design for registering said design in a button feeding and attaching mechanism is in the form of a rib 30 struck up from the flange 23, which rib, in the assembling of the cap or shell on the body, is caused to assume said definite relation to the design. In said figures the rib 30 is shown as bearing the same relationship to the design as does the groove 28 in Figs. 1 to 3. In said Figures 4 and 5 the hub of the button is shown as formed in the same manner as in Figs. 1 to 3, that is, for cooperation with a tack (not shown) which is adapted to be passed through the article to which the button is to be attached substantially simultaneously with the securing of the button member proper to said tack.

In Figs. 6 and 7 the means on the button which bears a definite relation to the design on the cap is in the form of an indentation or detent in the hub intermediate the length thereof. In Figs. 8 and 9 the means on the button which bears a definite relation to the design is in the form of an indented rib or groove 33 extending longitudinally of the hub, while in Figs. 10 and 11 the equivalent means is in the form of a knurled portion 34 extending longitudinally of the hub. It will be appreciated, however, that the groove 33 and the knurled portion 34 need not extend the full length of the hub but may be of any lesser length. In other words, the means on the button which bears a definite relation to the design need only be of such character as is capable of cooperative engagement with means on the button feeding and attaching mechanism for properly registering the design on the button at the attaching station.

In Figs. 12 and 13 I have shown the application of my inventive idea to an ordinary sew-on button. In said figures the sew-on button 35 having two spaced holes 36 is formed on its top face with the characters "OK", the said letters being disposed in flanking relation to the holes 36. For orienting such button so as to present it in definite position at the button-attaching station of an automatic sew-on button machine, I form in the back of said button a groove or recess 37 along a radial line, which, as shown, is at right angles to the diameter passing through the holes 36, or, in other words, at a right angle to the upright position of the letters "OK". Obviously the groove 37 may be made to bear any predetermined angular relation to the design for cooperation with an engaging element of the button-feeding mechanism so as to definitely position the button at the button sew-on station.

In each of the examples of the invention as hereinbefore described, it will be observed that the various means on the buttons for orienting the design always bears a definite relation to said design and therefore renders it impossible for the buttons to be fed to the attaching station in any other than the proper position. In the various modifications shown, it will be observed that a preliminary setting of the body portion with respect to the cap or shell is necessary in assembling the button parts in the process of manufacture to accurately register the groove, rib, detent, knurling and the like, with the design on the cap. This problem of assembling, however, does not constitute part of the present invention.

The invention as hereinbefore described has been directed primarily to tack buttons of the top shell type and to a sew-on button. However, it will be appreciated that the concept underlying the present invention is also applicable to snap fastener elements and other devices which are subject to analogous problems in assembling, hence I do not wish to be limited to the specific types of buttons herein disclosed nor to the specific means for registering the design with a button feeding and attaching mechanism, since these basic considerations may be varied within the scope of the appended claims without departing from the spirit of the invention.

What I claim is:

1. A button or the like comprising a top and a hub, a design on its top and means on a part of the button disposed out of the surface contour thereof and bearing a definite relation to the design for registering the design with a button-attaching means.

2. A button or the like comprising a top and a hub, a design on its top and means on the button rearwardly of the top extending beyond the normal surface contour of said button and bearing a definite relation to the design for registering the design with a button-attaching means.

3. A button or the like having a top and a hub, a design on the top and means on the hub bearing a definite relation to the design adapted for co-operative engagement with orienting means on a button-attaching means for registering the design with a button-attaching means.

4. A button or the like having a top and a hub, a design on the top and a part on the hub disposed out of the surface contour thereof and bearing a definite relation to the design for registering the design with a button-attaching means.

5. A button or the like having a top and a hub, a design on the top and a recess on the hub bearing a definite relation to the design for registering the design with a button-attaching means.

6. A button of the top shell type, comprising a top shell and a body member over which the shell is mounted, the shell having a design on the top thereof and the body member having a recess therein bearing a definite relation to the design for registering the design with a button-attaching means.

7. A tack button comprising a body portion and a shell mounted thereon having a design on its top and means on a part of the button disposed out of the surface contour thereof and bearing a definite relation to the design for registering the design with a button-attaching means.

8. A tack button comprising a body portion and a shell mounted thereon having a design on its top and means on the body portion disposed out of the surface contour thereof and bearing a definite relation to the design for registering the design with a button-attaching means.

9. A tack button comprising a head and a shank, the head having a design on its top and means on a part of the button disposed out of the surface contour thereof and bearing a definite relation to the design for registering the design with a button-attaching means.

10. A staple button comprising a head and a shank, the head having a design on its top and means on a part of the button disposed out of the surface contour thereof and bearing a definite relation to the design for registering the design with a button-attaching means.

JEROME G. WOLFF.