Feb. 8, 1949. O. J. HUELSTER 2,461,324

PLASTIC BUTTON

Filed June 20, 1945

Fig. 1.

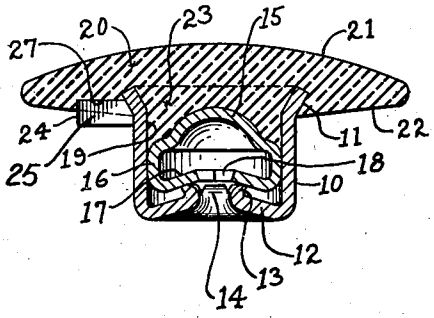


Fig. 2.

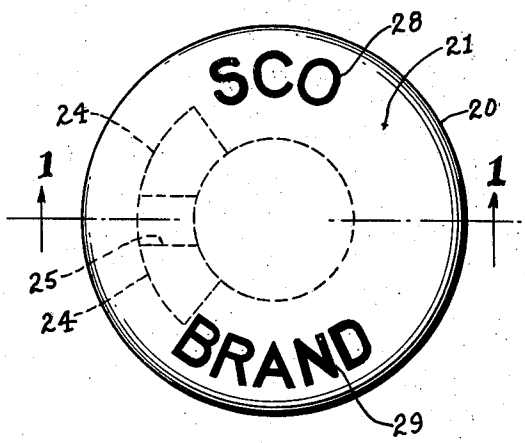


Fig. 3.

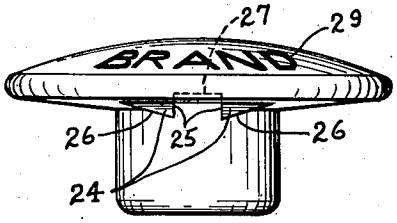


Fig. 4.

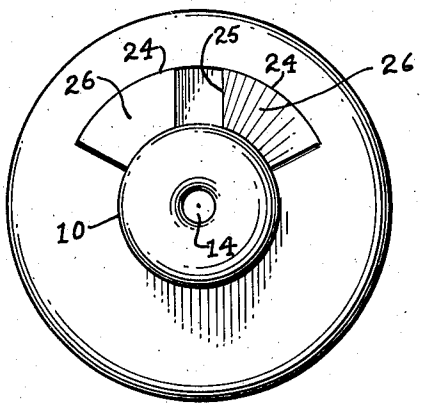
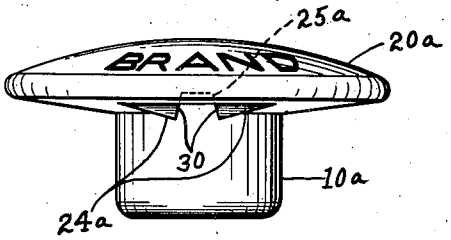


Fig. 5.



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PLASTIC BUTTON

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6 Claims. (Cl. 24—95)

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This invention relates to buttons wherein at least the cap or head portion of the button is composed of plastic material. More particularly, the invention relates to buttons wherein the cap or head has on the under surface thereof integral means for orienting a design on the head to facilitate proper positioning of the design on a support to which the button is attached.

Still more particularly, the invention deals with buttons of the kind defined, wherein the orienting means comprises spaced lugs with a recess therebetween adapted to receive an orienting finger, the lugs having tapered wall structures to give strength thereto and also to centralize an orienting finger on the cap in providing accurate alinement of the button on a support.

The novel features of the invention will be best understood from the following description, when taken together with the accompanying drawing, in which certain embodiments of the invention are disclosed and, in which, the separate parts are designated by suitable reference characters in each of the views and, in which:

Fig. 1 is a sectional view through a tack type of button showing one adaptation of my invention, the button being shown on an enlarged scale and the section being substantially on the line 1—1 of Fig. 2.

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

Fig. 3 is a side edge view of the button shown in Figs. 1 and 2 looking at the left side of the button as appearing in said figure.

Fig. 4 is a bottom plan view of the button shown in Figs. 1–3; and

Fig. 5 is a view similar to Fig. 3 showing a modification.

My present invention deals with buttons or fastener devices of various kinds and classes and, in illustrating one adaptation of the invention, the button illustrated is of a type and kind adapted to receive a tack in securing the button to a garment or other support.

In buttons of this type and kind, quite often the surface of the button has thereon a design, name or other type of characterization or ornamentation and, in such instances, it is often desirable to properly position a series of buttons on the support in maintaining an alinement of the designs or ornamentations. To this end, machines attaching the buttons employ what is generally referred to as orienting fingers to bring the button cap or head into a predetermined position in the machine prior to attachment of the button to a support.

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My present invention is more particularly concerned with buttons wherein the cap or head comprises a moulded or cast body of plastic or other material and in simultaneously forming in the moulded or cast body orienting means comprising a pair of spaced lugs protruding from the lower surface of the body outwardly of the hub or shank and, further, in forming on said lugs bevelled wall surfaces for purposes more fully hereinafter defined.

In Figs. 1–4 inclusive is shown one adaptation of the invention and, in these figures, 10 represents a cylindrical hub or socket portion or member having, at its upper end, an outwardly extending annular anchorage flange 11 and, at its lower end, an inturned substantially conical wall 12 terminating in upwardly and outwardly curved flange portions 13. Centrally of the wall 12 is an admission opening 14, through which the prong of a tack is adapted to pass in securing the button to a support, as is well known in this art. At 15 is shown a dome-shaped anvil part. The part 15 includes a downwardly directed sleeve portion 16 arranged adjacent the wall of the hub 10 and the sleeve portion terminates in an inwardly and upwardly inclined wall portion 17, centrally of which is a tack receiving opening 18. It will appear that the wall portion 17 is arranged in abutting relation with the flange portions 13, thus, forming, when the parts 10 and 15 are assembled, a large chamber 19 in the upper portion of the hub and within the flange 11.

At 20 is shown the head or cap of the button which is in the form of a moulded or cast body of any suitable material.

In the present construction, reference is made for illustrative purposes to plastic material and, here, it will be apparent that thermosetting and thermoplastic types of such materials can be employed. The body 20 is considerably larger in diameter than the hub 10 and has a domed outer surface 21, a slightly bevelled inner surface 22 and a body portion 23 arranged in the chamber 19 to fit snugly around the anvil member 15 and, in the hub 10, the body 23 extends below the surface 22 of the cap, as will clearly appear from a consideration of Fig. 1 of the drawing.

In moulding or casting the cap or head 20, a pair of downwardly extending lugs or projecting members 24 is formed on the surface 22, the lugs being spaced apart to form a socket or recess 25 adapted to receive the orienting finger of a button attaching machine. The walls of the lugs 24 taper outwardly, as seen at 26, to reinforce the lugs and also to facilitate passage of an orienting

finger over the surface 22 and the lugs 24 in entering the recess 25. It will appear from a consideration of Fig. 1 of the drawing that the recess 25 extends into the body of the cap or button beyond the surface 22, as shown at 27, to provide a relatively large surface on the lugs 24 without projecting said lugs to any appreciable degree beyond the surface 22 of the cap.

It will be apparent that the recess 25 will be arranged in a predetermined angular position with respect to designs, ornamentations or characterizations appearing on the surface 21 of the cap 20, for example, the letters "S C O," as seen at 28, and the word "Brand," as seen at 29. In the present construction, the recess 25 is arranged at right angles to an imaginary center line extending vertically through the two characters 28 and 29 as seen in Fig. 2, so that these characters will maintain an upright readable position as they are arranged on the support to which the button is attached. Of course, any predetermined relationship of angularity may be provided, depending upon the machine and the work to which the buttons are attached and, in some instances, the recess 25 may be in alinement with the center of one or more of the markings on the outer surfaces of the button.

In Fig. 5 of the drawing is shown a slight modification. In this figure, 10*a* represents a hub similar to the hub 10; 20*a* a cap or head, generally of the form of the cap or head 20 being modified in providing a pair of lugs 24*a* having a slightly conical socket or recess 25*a* by virtue of inwardly contracting or tapering walls 30. These walls 30 will aid in definitely centering and alining a button with respect to a support, it being understood that the orienting finger of the machine will be shaped to seat on the bevelled walls. In other words, with a straight wall slot, such as the slot 25, sufficient clearance must be provided for free insertion and removal of an orienting finger, thus slight variations can be experienced in the alinement of the button cap. With the structure shown in Fig. 5, a positive and accurate alinement can be obtained. Furthermore, the bevelling of the surfaces 30 gives further strength to the lugs and will also facilitate removal of the orienting finger after the button has been attached to its support.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A button comprising a cap, said cap comprising a molded body, a hub portion, one end of the hub portion being embedded and anchored in said molded body, the major part of the hub portion protruding from one surface of said body centrally thereof, said body outwardly of the hub and within the peripheral edge thereof having a pair of circumferentially spaced and radially extending lugs projecting from said surface of the body adjacent the hub, and said lugs forming therebetween an orienting recess in alining the button with respect to a support to which the button is attached.

2. A button comprising a cap, said cap comprising a molded body, a hub portion, one end of the hub portion being embedded and anchored in said molded body, the major part of the hub portion protruding from one surface of said body centrally thereof, said body outwardly of the hub and within the peripheral edge thereof having a pair of circumferentially spaced and radially extending lugs projecting from said surface of the body adjacent the hub, said lugs forming therebetween an orienting recess in alining the button with respect to a support to which the button is attached, and lower surfaces of said lugs tapering laterally.

3. A button comprising a cap, said cap comprising a molded body, a hub portion, one end of the hub portion being embedded and anchored in said molded body, the major part of the hub portion protruding from one surface of said body centrally thereof, said body outwardly of the hub and within the peripheral edge thereof having a pair of circumferentially spaced and radially extending lugs projecting from said surface of the body adjacent the hub, said lugs forming therebetween an orienting recess in alining the button with respect to a support to which the button is attached, and said recess extending into said surface of said molded body in providing wide inner adjacent surfaces on said lugs while minimizing projection of the lugs with respect to said surface.

4. A button comprising a cap, said cap comprising a molded body, a hub portion, one end of the hub portion being embedded and anchored in said molded body, the major part of the hub portion protruding from one surface of said body centrally thereof, said body outwardly of the hub and within the peripheral edge thereof having a pair of circumferentially spaced and radially extending lugs projecting from said surface of the body adjacent the hub, said lugs forming therebetween an orienting recess in alining the button with respect to a support to which the button is attached, said recess extending into said surface of said molded body in providing wide inner adjacent surfaces on said lugs while minimizing projection of the lugs with respect to said surface, and inner adjacent surfaces of the lugs converging in the direction of said body.

5. A button comprising a tubular hub portion, one end of the hub portion having an outwardly flared flange, the button having a cap comprising a molded body in which said flange is embedded, the hub beyond the limits of said flange protruding from the lower surface of the cap outwardly of said hub, part of the molded body of said cap extending into the hub portion below said lower surface of the cap, a pair of circumferentially spaced and radially extending lugs projecting from said lower surface of the cap, outer ends of said lugs terminating inwardly of the peripheral edge of the cap, said lugs forming therebetween an orienting recess for alining the button with respect to a support to which the button is attached, and said recess extending into said surface of the cap in providing wide inner adjacent surfaces on said lugs while minimizing projection of the lugs with respect to said surface.

6. A button comprising a tubular hub portion, one end of the hub portion having an outwardly flared flange, the button having a cap comprising a molded body in which said flange is embedded, the hub beyond the limits of said flange protruding from the lower surface of the cap outwardly of said hub, part of the molded body of said cap extending into the hub portion below said lower surface of the cap, a pair of circumferentially spaced and radially extending lugs projecting from said lower surface of the cap, outer ends of said lugs terminating inwardly of the peripheral edge of the cap, said lugs forming therebetween an orienting recess for alining the button with respect to a support to which the

button is attached, said recess extending into said surface of the cap in providing wide inner adjacent surfaces on said lugs while minimizing projection of the lugs with respect to said surface, and an anvil member in said hub and seating on that part of the molded body extending into the hub.

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