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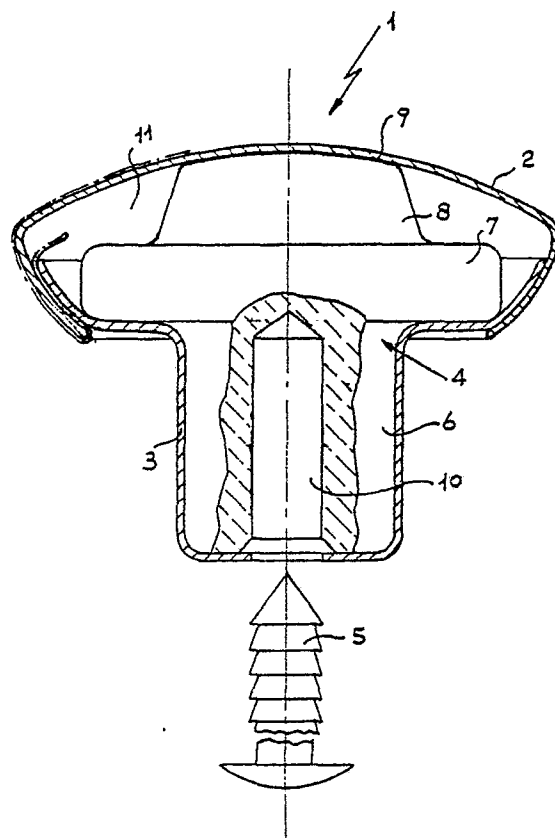
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(54) Quick-coupling button of the type with fabric-covered dome.

(57) The quick-coupling button of the type with fabric-covered dome comprises a bell-shaped element (3) associated with a dome (2), said bell-shaped element and said dome defining, in their interior, a seat for the accommodation of a body (4) for the retention of a fixing nail (5) for fixing the button to an item of clothing; the retainer body has a cylindrical portion (6) which extends within the bell-shaped element and comprises a cylindrical head (7) having spacer means (8) for locking the retainer body between the dome and the bell-shaped element.



**FIG. 1**

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## QUICK-COUPLING BUTTON OF THE TYPE WITH FABRIC-COVERED DOME

The present invention relates to a quick-coupling button of the type with fabric-covered dome.

As is known, buttons having their dome covered by fabric have, associated with said dome on the side opposite thereto, a half-ring which protrudes therefrom, inside which the sewing thread is passed to fix the button e.g. to an item of clothing.

Such a button, due to its particular structure, requires a relatively long time for its fixing to the item of clothing for which it is intended and furthermore requires a certain amount of sewing thread which in most cases, after a more or less long period of time, does not ensure the coupling of the button to the fabric.

This last disadvantage is mainly ascribable to the fact that all the stress applied to the button must be withstood by the resistance of the thread, contrary to what occurs in buttons of the so-called "jeans" type, which are fixed to the fabric is achieved by inserting a nail which engages in the body of the button after perforating the fabric.

On the other hand these last buttons have a flat dome which poorly associates with any fabric for its covering.

The aim proposed by the invention is to eliminate the above described disadvantages by providing a quick-coupling button of the type with fabric-covered dome which ensures its valid fixing to the item of clothing for which it is intended.

Within this aim, an important object of the invention is to provide a quick-coupling button of the type with fabric-covered dome which has a low cost suitable to facilitate its diffusion among users.

Not least object of the invention is to provide a quick-coupling button of the type with fabric-covered dome which can be rigidly associated with an item of clothing in a simple and automated manner without using sewing thread.

This aim, as well as these and other objects, are achieved by a quick-coupling button of the type with fabric-covered dome, comprising a bell-shaped element associated with the dome, said dome and said bell-shaped element defining, in their interior, a seat for the accommodation of a body for retaining a nail for fixing the button to an item of clothing, characterized in that said retainer body has a cylindrical portion extending within said bell-shaped element and comprising a cylindrical head having, on the side opposite to said cylindrical portion, spacer means for locking said retainer body between said dome and said bell-shaped element.

Further characteristics and advantages of the invention will become apparent from the detailed description of a quick-coupling button of the type

with fabric-covered dome according to the invention, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

the only figure 1 is a lateral elevation view, in transverse cross section, of the button according to the invention.

With particular reference to the above described figure, the button, generally indicated by the reference numeral 1, comprises a dome 2 upwardly associated with a bell-shaped element 3 so as to define with the latter a seat for the accommodation of a body 4 for retaining a nail 5 for fixing the button to an item of clothing which is not shown.

Conveniently, the retainer body 4 has a cylindrical portion 6, extending within the bell-shaped element 3 and comprising a cylindrical head 7 having, on the side opposite to the cylindrical portion 6, spacer means, and more precisely an expansion 8 which allows to lock the retainer body between the dome 2 and the bell-shaped element 3.

The expansion 8 advantageously has the surface 9, which is directed towards the dome 2, cambered so that it rests perfectly on the surface of the dome 2 having the same camber. In this manner, when the nail 5 is caused to penetrate on automatic machines inside the hole 10 which is coaxial to the retainer body, a double advantages is obtained, i.e. the backward motion of the retainer body 4 is prevented, avoiding an only partial penetration of the nail in the channel 10, and at the same time the deformation of the dome 2, which rests horizontally on the die, is prevented.

Merely for the sake of greater precision, it should be furthermore added that the expansion 8 is coaxial to the cylindrical head 7 and has a diameter which is substantially smaller than said head but greater than the diameter of the cylindrical portion 6.

The expansion 8 furthermore advantageously defines, inside the dome 2, an annular interspace 11 adapted to contain any flaps of fabric 12 for covering the dome 2.

The operation of the quick-coupling button of the type with fabric-covered dome is evident from what is described and illustrated; in particular, as already mentioned, by virtue of the presence of the expansion 8 on the retainer body it is possible to prevent, during the insertion therein of the fixing nail 5, the deformation of the dome 2 as well as the only partial penetration of the nail 5 into the channel 10 due to the movement of the retainer body between the bell-shaped element 3 and said dome 2.

In practice, the materials employed, as well as the dimensions, may be any according to the requirements and to the state of the art.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the scope of each element identified by way of example by such reference signs.

## Claims

1. Quick-coupling button of the type with fabric-covered dome, comprising a bell-shaped element (3) associated with a dome (2), said element and said dome defining, in their interior, a seat for the accommodation of a body (4) for the retention of a nail (5) for fixing the button to an item of clothing, characterized in that said retainer body (4) has a cylindrical portion (6) which extends within said bell-shaped element (3) and comprises a cylindrical head (7) having, on the opposite side to said cylindrical portion (6), spacer means (8) for locking said retainer body between said dome and said bell-shaped element.

2. Button according to claim 1, characterized in that said spacer means comprise an expansion (8), the surface (9) whereof which is directed towards said dome being cambered.

3. Button according to claim 2, characterized in that said camber (9) is substantially identical to the camber of said dome (2).

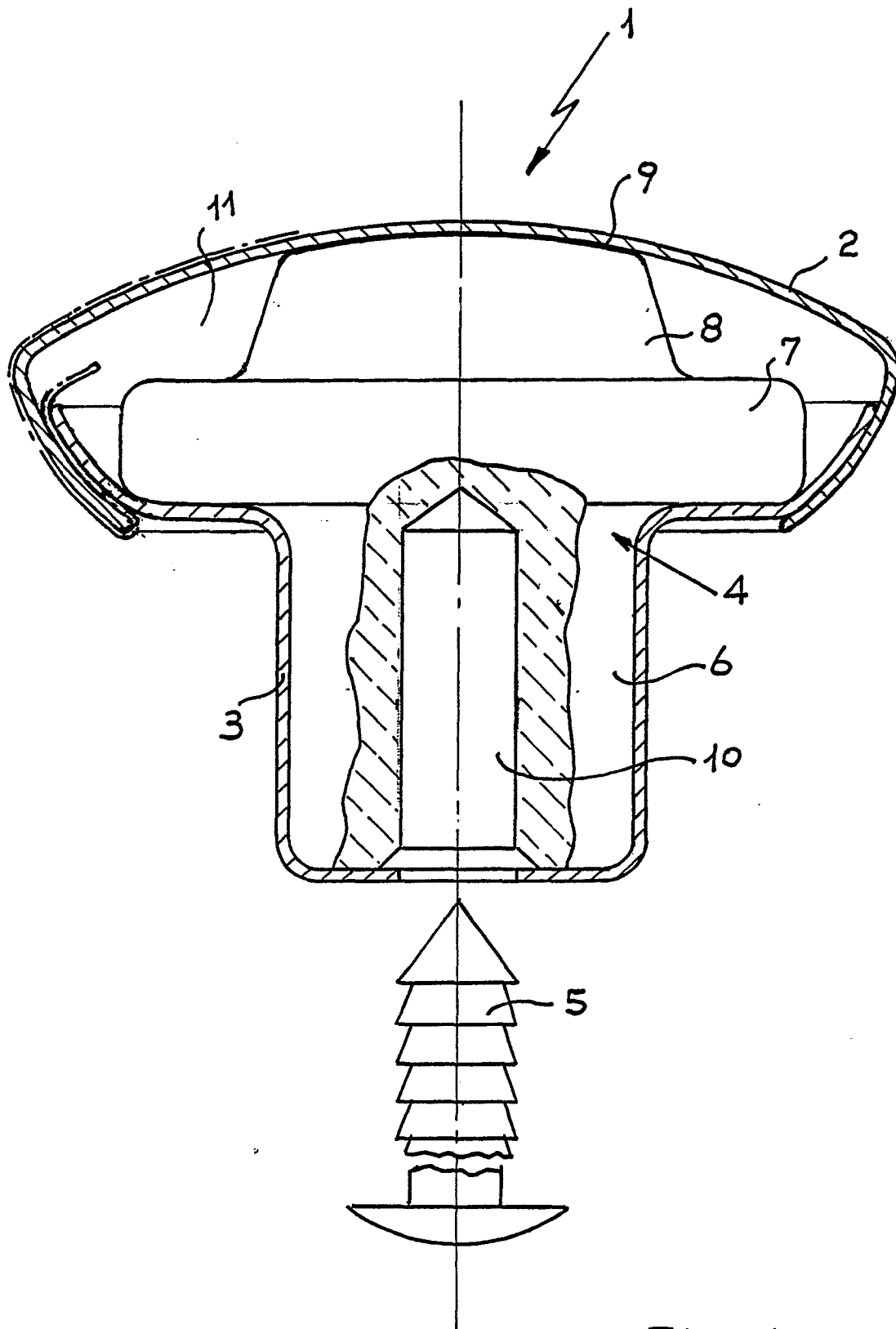
4. Button according to claim 1, characterized in that said expansion is coaxial to said cylindrical portion axially having a hole (10) for fixing said nail.

5. Button according to one or more of the preceding claims, characterized in that the diameter of said expansion is smaller than the diameter of said cylindrical head and greater than the diameter of said cylindrical portion.

6. Button according to one or more of the preceding claims, characterized in that said expansion defines in said dome an interspace (11) for containing the flaps of a fabric for covering said dome.

7. Quick-coupling button of the type with fabric-covered dome, characterized in that it comprises one or more of the described and/or illustrated characteristics.

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	GB-A-132921 (E. TOWNSHEND) * page 2, line 35 - page 3, line 2; figures 1-4 *	1-6	A44B1/08 A44B1/12
A	GB-A-2071991 (YOSHIDA KOGYO KK) * page 1, line 129 - page 2, line 66; figure 6 *	1	
A	FR-A-2156213 (BERNING & SÖHNE) * page 3, line 36 - page 5, line 15; figure *	1	
A	FR-A-567598 (WALDES & CIE) * page 1, lines 37 - 46; figure 1 *	1	
A	DE-A-2738703 (SCHAEFFER-HOMBERG) * page 6, line 10 - page 7, line 14; figures *	1	
A	US-A-4700435 (E. D. BUSH) * figures 4, 5 *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			A44B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 09 AUGUST 1989	Examiner GARNIER F.M.A.C.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		I : theory or principle underlying the invention F : earlier patent document, but published on, or after the filing date D : document cited in the application 1 : document cited for other reasons δ : member of the same patent family, corresponding document	