May 9, 1961

A. DRITZ

2,983,009

COVERED BUTTON

Filed Nov. 8, 1957

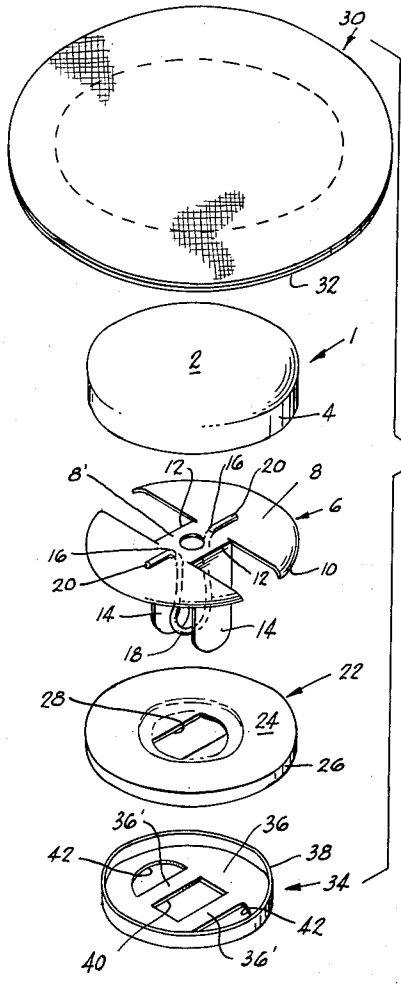

Fig. 1.

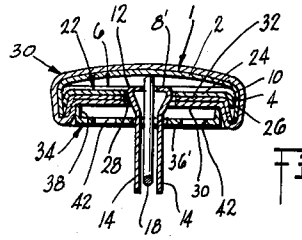

Fig. 4.

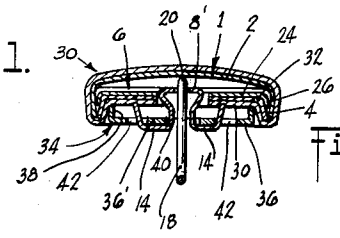

Fig. 5.

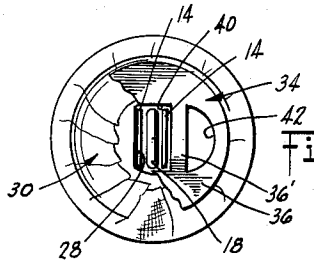

Fig. 6.

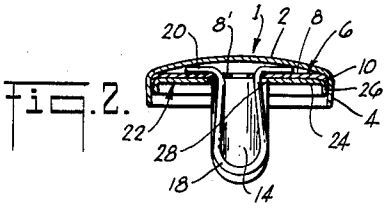

Fig. 2.

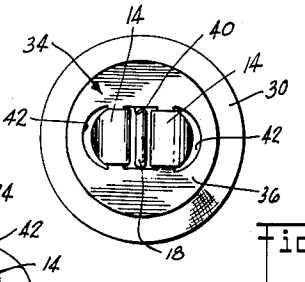

Fig. 7.

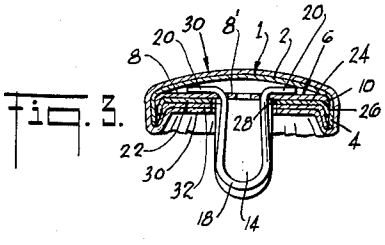

Fig. 3.

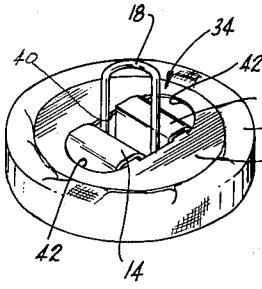

Fig. 8.

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COVERED BUTTON

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17 Claims. (Cl. 24—113)

The present invention relates to the structure of a button to be covered and assembled by a home dressmaker, and in particular to structure by means of which the parts of the button are retained in assembled position.

The demand is exceedingly great on the part of the public for buttons which can be assembled by the home dressmaker, and which may be covered by her with fabric appropriate to the garment with which they are to be used. Such buttons generally comprise telescopable top and bottom sections, the top section first being covered by the fabric selected by the home dressmaker before the bottom section is secured thereto. Despite the widespread existence and large volume of sales of buttons of this type, they have in the past left much to be desired, particularly with respect to the security of attachment between the top and bottom button sections and the security with which the covering fabric is held in place.

It has in the past been proposed to provide the top button section with one or more prongs adapted to be passed through the bottom button section and bent along the outer surface thereof in order to hold the sections in position. This construction has not met with any particular degree of consumer acceptance, in part because the security of attachment afforded thereby was not particularly great, in part because the tips of the prongs were exposed and tended to catch the fabric of the garment to which the button was attached, and particularly that portion of the garment into which the button is adapted to be buttoned, and in part because the button structure was either weak or of undue complexity.

The button structure of the present invention is of the same general type as above set forth, but is so designed as to eliminate the drawbacks set forth above, and by means of a structure which can readily be manufactured and assembled at a minimal and competitive cost. In addition, the means employed to retain the two button sections in assembled position is also effective to engage the covering fabric and assist in retaining that covering fabric in proper taut condition on the top button section.

In accordance with the above, the top button section is provided with a pair of prongs adapted to pass through an aperture in the bottom button section when the two sections are assembled, the projecting portions of these prongs or fingers then being bent re-entrantly into the hollow interior of the button through additional apertures formed in the bottom button section on opposite sides of the first mentioned aperture, the tips of the re-entrantly bent fingers or prongs preferably engaging a portion of the fabric covering and thus assisting in holding the latter in place. These fingers are formed as an integral part of a sheet of metal or the like received within the shell of the top button section, that sheet being held in place within the shell by being sandwiched between the shell and a second member telescoped into the shell, the second member having an aperture through which the fingers or prongs extend. The sheet which defines the fingers also carries a securing loop positioned between and extending substantially parallel to the fingers, that securing loop being here shown in the form of an appropriately shaped strip of wire or the like.

In addition, means comprising a ring of paper or comparable material is interposed between the inside of the top button section and that portion of the covering fabric which is folded inside the top button section, the paper sheet being adhesively secured both to the top button section and to the infolded fabric portion, thereby further serving to retain the folded fabric covering in proper condition, but without in any way detracting from the appearance of the button and its capacity to retain that appearance.

To the accomplishment of the above, and to such other objects as may hereinafter appear, the present invention relates to a button structure as defined in the appended claims and as described in this specification, taken together with the accompanying drawings, in which:

Fig. 1 is an exploded view of the parts of the button of the present invention, including the fabric covering therefor;

Fig. 2 is a cross sectional view of the top button section;

Fig. 3 is a cross sectional view of the top button section with the fabric covering applied thereto;

Fig. 4 is a cross sectional view of the button with the button section telescoped into the fabric-covered top section, but before the prongs are bent down;

Fig. 5 is a cross sectional view similar to Fig. 4 but showing the prongs re-entrantly bent and engaging the fabric cover;

Fig. 6 is a bottom plan view of the button of Fig. 4, with a portion of the bottom button section broken away;

Fig. 7 is a bottom plan view of the button of Fig. 5; and

Fig. 8 is an inverted three-quarter perspective view of the button of Fig. 5.

The top button section comprises a shell generally designated **1** having a base **2** and a depending rim **4**. Received inside the rim **4**, and at least partially seated on the base **2**, is a first member generally designated **6** comprising a base **8** of thin bendable metal or the like, the periphery **10** of which may be slightly curved so as to conform to the inner surface of the shell rim **4**. Formed integrally from the sheet **8** and bent up therefrom about the lines **12**, are a pair of fingers or prongs **14**, spaced from one another by the base portion **8'**. Holes **16** are formed in the base **8** inside the bending lines **12** or projections thereof, and a securing loop **18** is mounted on the base **8**, portions thereof passing through the hole **16** and then being bent over the base **8** at **20**, the body of the securing loop **18** extending between and substantially parallel to the fingers **14**. A second member generally designated **22** and defined by a base **24** and a rim **26** is also received within the shell **2**, the rim **26** extending along and firmly frictionally engaging the shell rim **4**. The base **24** of the member **22** is provided with a central aperture **28** through which the fingers **14** and securing loop **18** pass. As may best be seen from Fig. 2, in assembly of the top button section the first member **6** is seated in the shell **2** and then the second member **22** is forced into the shell **2** so as to press the first member **6** into seated position and hold it there.

The top button section is adapted to be covered by a sheet of fabric generally designated **30**, that fabric being of a size such as to completely cover the outer periphery of the shell **2** and its rim **4** and then to be folded inside the shell **2** and over the radially outer portion of the exposed surface of the second member **24**, as may be seen in Fig. 3. As here specifically disclosed the fabric sheet **30** is provided along the radially outer portion thereof which is adapted to be folded into the shell **2** with an

attached ring 32 of fabric the exposed surface of which is provided with a layer of pressure-sensitive adhesive. The ring 32 may be secured to the fabric sheet 30 by a similar layer of pressure-sensitive adhesive on the other surface thereof, and may be provided to the home user already cut into shape and with its adhesive coatings protected by strippable paper layers, as is well known. When the fabric is folded inside the shell 2 it will be seen that the adhesive-exposed surface of the ring 32 will be pressed against the radially inner portions of the shell rim 4 and the second member rim 26, as well as against the base 24 of the second member 22. Such pressure will cause the ring 32 to adhere to those surfaces of the button, and hence the fabric, when once drawn taut, will tend to remain in that condition, even during the period intervening between the infolding of the fabric and the insertion of the bottom button section, as set forth below. It will be noted that the width of the ring 32 is such that it is completely received within the top button section. Hence even if the subjection of the button to various cleaning processes should cause some of the adhesive between the ring 32 and the fabric 30 to discolor the fabric, that discolorization will be inside the button and will not affect its appearance. Although the ring 32 is specifically disclosed as attached to the fabric covering 30 when the latter is infolded into the top button section, it would, of course, be possible to initially apply the ring 32 inside the top button section and then cover the button with the fabric, the infolded portion of the fabric adhering to the exposed adhesive surface of the ring 32.

The bottom button section, generally designated 34 is in the form of a shell having a base 36 and an upstanding rim 38. The size of the bottom button member 34 is such that it can be telescoped into the covered top section, with its rim 38 received snugly inside the infolded portion of the fabric sheet 30 which lies along the inner surface of the shell rim 4 of the top button section. This preferably snug fit is not, however, relied upon exclusively to retain the button sections in assembled condition. For that purpose the base 36 of the bottom button section 34 is provided with a central aperture 40 through which the fingers 14 and the securing loop 18 on the top button section are adapted to pass. Additional apertures 42 are provided in the base 36 to either side of the first mentioned aperture 40. After the button sections have been assembled as shown in Figs. 4 and 6, the fingers 14 are then bent over the base portions 36' of the bottom button section 34 between the aperture 40 and the apertures 42, and are then reentrantly bent through the apertures 42 into the space between the base 36 of the bottom button section 34 and the base 24 of the second member 22 in the top button section. Preferably, the length of the fingers 14 and the size of the fabric covering 30 are such that portions of the fabric covering 30 extend beneath the apertures 42 and the tips of the fingers 14 are pressed down to dig into those portions of the fabric covering 30, thus tending to retain the fabric covering 30 tautly on the top button section, all as may be best seen in Fig. 5. The securing loop 18 projects from the assembled button so that the button may be sewn onto a garment in conventional manner.

The fingers 14 are firmly secured to the top button section, but without weakening that button section or forming any discontinuity in its outer surface. They hold the bottom button section 34 firmly and reliably in position, and the bottom button section 34 in turn engages the fabric covering 30 to hold the latter in position. This latter engagement occurs between the rims 38 and 4 and between the edge of the rim 38 and the base 24 of the member 22. This, together with the previously mentioned engagement between the tips of the fingers 14 and the fabric covering 30, provides for effective and substantially permanent retention of the fabric covering 30 in proper condition.

All of the parts of the button here disclosed may very readily be manufactured inexpensively on a large scale by conventional stamping, bending and forming techniques. They all may be formed from thin sheets of metal or the like, or, if desired, they or some of them could be molded of suitable plastic material. The structure is such that the parts need not be made with any great degree of dimensional precision, and when the top and bottom button sections are presented to the ordinary housewife, whose mechanical skill is usually comparatively undeveloped, the cover, assembling and securing operations may readily be performed by her with a high degree of effectiveness and with an exceptionally high degree of attractiveness in the finished product.

While but a single embodiment of the present invention has been here disclosed, it will be apparent that many variations may be made with respect thereto, all within the scope of the invention as defined in the following claims.

I claim:

1. In a button comprising connected top and bottom sections; the improvement which comprises said top section comprising a shell covering and being secured to said bottom section, said top section having a pair of bendable fingers extending therefrom toward said bottom section, said bottom section having a first aperture through which said fingers pass when said sections are assembled and having second and third apertures on opposite sides of said first aperture through which said fingers are bent to extend into said button when said sections are assembled.

2. In a button comprising connected top and bottom sections; the improvement which comprises said top section having a pair of bendable fingers extending therefrom toward said bottom section, said bottom section having a first aperture through which said fingers pass when said sections are assembled and having second and third apertures on opposite sides of said first aperture through which said fingers are bent to extend into said button when said sections are assembled, said top section being covered by material which extends partially over the lower surface thereof above said second and third apertures in said bottom section, said fingers being of a length such as, when bent through said second and third apertures, to engage said material.

3. In a button comprising connected top and bottom sections; the improvement which comprises said top section having a pair of bendable fingers extending therefrom toward said bottom section, said bottom section having a first aperture through which said fingers pass when said sections are assembled and having second and third apertures on opposite sides of said first aperture through which said fingers are bent to extend into said button when said sections are assembled, said top section comprising a shell, a first member received within said shell, integral portions of said first member extending therefrom to define said fingers, and a second member secured within said shell beneath said first member by direct engagement with one of said shell and said first member and having an aperture through which said fingers extend.

4. The button of claim 3, in which said top section is covered by material which extends partially over the lower surface thereof above said second and third apertures in said bottom section, said fingers being of a length such as, when bent through said second and third apertures, to engage said material.

5. In a button comprising connected top and bottom sections; the improvement which comprises said top section having a pair of bendable fingers extending therefrom toward said bottom section, said bottom section having a first aperture through which said fingers pass when said sections are assembled and having second and third apertures on opposite sides of said first aperture through which said fingers are bent to extend into said button

when said sections are assembled, said top section comprising a shell having a rim, a first member received within said shell, integral portions of said first member extending therefrom to define said fingers, and a second member having a rim secured within said shell beneath said first member, said second member having a rim and being held in place by direct engagement between its rim and the rim of said shell and having an aperture through which said fingers extend.

6. In a button comprising connected top and bottom sections; the improvement which comprises said top section having a pair of bendable fingers extending therefrom toward said bottom section and having, between said fingers, a securing loop extending in the same direction, said bottom section having a first aperture through which said fingers and said securing loop pass when said sections are assembled and having second and third apertures on opposite sides of said first aperture through which said fingers are bent to extend into said button when said sections are assembled.

7. The button of claim 6, in which said top section comprises a shell, a first member received within said shell, integral portions of said first member extending therefrom to define said fingers, and a second member secured within said shell beneath said first member and having an aperture through which said fingers and said securing loop extend.

8. The button of claim 6, in which said top section comprises a shell having a rim, a first member received within said shell, integral portions of said first member extending therefrom to define said fingers, and a second member having a rim secured within said shell beneath said first member, said second member having a rim and being held in place by operative engagement between its rim and the rim of said shell and having an aperture through which said fingers and said securing loop extend.

9. The button of claim 6, in which said top section comprises a shell, a first member received within said shell, integral portions of said first member extending therefrom to define said fingers, said securing loop being carried by said first member, and a second member secured within said shell beneath said first member and having an aperture through which said fingers and said securing loop extend.

10. The button of claim 9, in which said securing loop comprises a loop of wire-like material the ends of which are received in apertures in said first member.

11. The button of claim 6, in which said top section comprises a shell having a rim, a first member received within said shell, integral portions of said first member extending therefrom to define said fingers, said securing loop being carried by said first member, and a second member having a rim secured within said shell beneath said first member, said second member having a rim and being held in place by operative engagement between its rim and the rim of said shell, and having an aperture through which said fingers and said securing loop extend.

12. In a button comprising connected top and bottom sections; the improvement which comprises said top section comprising a shell, a first member received within said shell and having integral portions thereof defining a pair of bendable fingers extending therefrom toward said bottom section, and a second member secured within said shell beneath said first member by direct engagement with one of said shell and said first member, said second member having an aperture through which said fingers extend, said bottom section having an aperture through which said fingers pass when said sections are assembled, said fingers being bendable over the outer surface of said bottom section to retain said sections in connected position.

13. The button of claim 12, in which said second member and said shell have rims, said second member being secured within said shell by direct engagement between its rim and the rim of said shell.

14. In a button comprising connected top and bottom sections; the improvement which comprises said top section comprising a shell, a first member received within said shell and having integral portions thereof defining a pair of bendable fingers extending therefrom toward said bottom section, said first member also carrying a securing loop between and extending in the same direction as said fingers, and a second member secured within said shell by direct engagement with one of said shell and said first member beneath said first member, said second member having an aperture through which said fingers and said securing member extend, said bottom section having an aperture through which said fingers and said securing loop pass when said sections are assembled, said fingers being bendable over the outer surface of said bottom section to retain said sections in connected position.

15. The button of claim 14, in which said securing loop comprises a loop of wire-like material the ends of which are received in apertures in said first member.

16. The button of claim 14, in which said second member and said shell have rims, said second member being secured within said shell by direct engagement between its rim and the rim of said shell.

17. The button of claim 16, in which said securing loop comprises a loop of wire-like material the ends of which are received in apertures in said first member.

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