Dec. 4, 1951 H. GROH 2,577,723

BUTTON COVER

Filed May 24, 1949

Fig. 3.

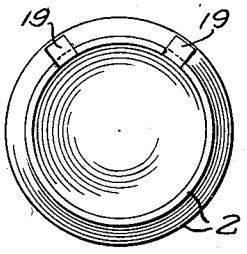



Fig. 4.

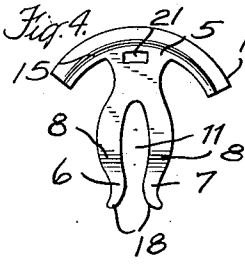
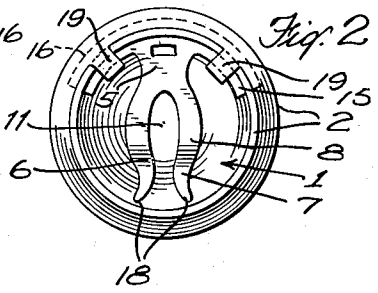



Fig. 2.



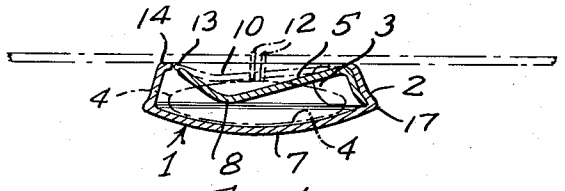




Fig. 1

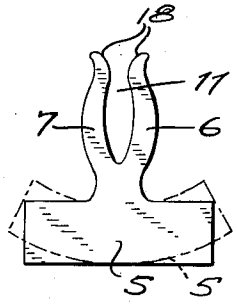



Fig. 6.

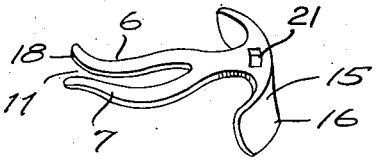



Fig. 5.

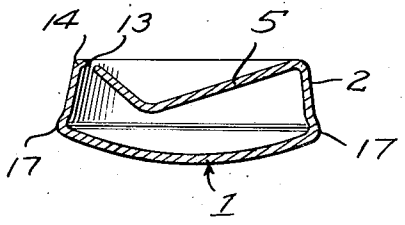



Fig. 7.

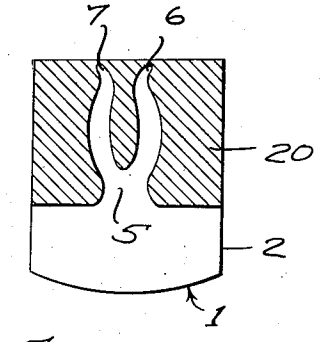



Fig. 8.

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Patented Dec. 4, 1951 2,577,723

# UNITED STATES PATENT OFFICE

2,577,723

## BUTTON COVER

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Application May 24, 1949, Serial No. 94,989

3 Claims. (Cl. 24—113)

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This invention relates to improved detachable button covers for use on dresses, shoes, shirts, etc., as well as to cover earring ornaments or even to be used directly as earrings themselves.

Detachable button covers are made for ornamental purposes. Ordinary cloth, plastic or bone buttons can be covered with detachable covers having an external appearance of a wholly different character. For instance, in place of cuff links, button covers can be slipped over ordinary shirt sleeve buttons to simulate the appearance of cuff links without the usual inconveniences of the latter. They can be detached and the shirts used without them as desired.

Detachable button covers usually consist of a hollow cap member which is secured around the shank or attaching thread of a button by means of some clasp arrangement which circumscribes the shank or attaching thread and is locked in position as by a catch on the underside of the cap member and hence of the button. The catch member is usually bifurcated and various more or less complicated constructions have been devised for this purpose. In some cases, the catch is hinged to one rim of the cap member and in other cases the bifurcated portion of the catch is arranged to have a contracted throat portion through which the button shank or attaching thread is squeezed and which serves to encircle the latter and prevent the cover from falling off.

In all of these prior devices, the button cover or the catch associated with it does not act positively to contain the button. At the most, the button shank or attaching thread is encircled and the means devised for this encirclement are necessarily intricate in view of the relatively small size of the articles in question.

The object of the present invention is to provide an improved button cover which is simple and cheap to manufacture and which in use applies a constant positive anchoring pressure on the under-surface of a button covered with it so as to hold the button cover tightly in place.

It is a further object of this invention to provide a button cover in which a bifurcated locking member is provided in the form of a spring plate so devised as to exert, in use, a constant pressure against the underside of a button covered therewith and at the same time allow relatively easy access to the button for the purpose of removing it.

It is a further object of this invention to provide a button cover of simple construction free from hinges, catches, or other special locking means requiring intricate workmanship and special construction and design.

It is a still further object of this invention to provide a button cover in which the whole article may be made either in one integral piece by stamping or molding from suitable materials such as spring brass or steel, plastics, etc., or at least

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in which the device may be made from not more than two pieces of metal etc., adapted to be quickly assembled in one simple assembly operation.

These objects are achieved, in accordance with this invention, by providing, in general, a detachable cover for buttons comprising a cover portion, a peripheral side wall secured to the underside of said cover portion and defining an enclosure for a button, a spring plate member secured at one end internally of said side wall and extending across said enclosure, the plate member first extending from the side wall toward the cover portion at an angle to the side wall and then being bent away from said cover portion to terminate at a point near to the part of the side wall opposite that to which it is secured, the plate member being bifurcated to define a recessed portion for reception therein of the button shank or attaching thread.

In a preferred form the spring plate member, which is bifurcated to receive the button shank or thread with which the button is attached to the fabric, acts as an anchoring means by providing positive pressure against the underside of a button at an eccentric or off-center point. The separation provided between the unsecured or free end of the spring plate member and the rim of the side wall allows the button to be introduced or removed from under the spring plate member. As soon as the button enters the enclosure it is gripped by the plate member and held securely in place.

The invention will be more clearly understood by referring to the accompanying drawings which illustrate preferred embodiments thereof and in which:

Fig. 1 illustrates a cross sectional view of a button cover in accordance with the invention in inverted position;

Fig. 2 is a rear plan view of one form of a button cover;

Figs. 3 and 4 are rear plan views of the component parts of the button cover illustrated in Fig. 2 before assembly;

Fig. 5 is a perspective view of one form of the bifurcated spring member on a somewhat enlarged scale;

Fig. 6 illustrates a form of the spring member during manufacture.

Fig. 7 illustrates a button cover in accordance with the invention formed in one piece, and

Fig. 8 illustrates in somewhat diagrammatic manner, the method of forming an integral button cover as shown in Fig. 7 in one stamping operation.

Referring to the drawings and especially to Figs. 1 to 6, there is shown a circular metallic button cover 1 having a spherical contour and provided with a peripheral side wall 2. The side wall 2 with the cover portion 1 provides enclosure

3 for the reception of a button 4 shown in dotted lines in Fig. 1.

Internally of the enclosure 3 and secured at one end to the side wall 2 is a bifurcated spring plate member 5 having arms 6 and 7. The plate member 5 is bent at an angle at 8 and being secured at 19 to the side wall 2, it exerts a constant positive pressure in use on the undersurface of the button as shown in dotted lines (10) in Fig. 1. The two arms 6 and 7 define a recessed portion 11 for the reception of a button shank or attaching thread 12. In normal position the plate 5 falls short of the opposite side of the wall to which it is attached to leave a gap 13 through which a button can be inserted whereupon the spring plate is forced out of normal position into locking or tensioning position in which it may substantially cross the entire width of the enclosure 3.

To assist in preventing the button from slipping out from under the button cover it is advantageous also to crimp over the rim of the wall 2 at least in that part near to which the plate 5 extends at its free end. This provides a flange 14 which acts as a barrier against inadverent release of the button cover.

It is preferable to form the member 5 with a depending portion 15 arranged and so formed as to terminate in a curved portion 16 which is adapted to rest in the junction of the wall 2 with the cover portion 1. The portion 15 is arranged to fit snugly along the inside of the button cover which, in turn, is preferably flared outwardly as at 17 (Fig. 1) in conformity with the shape of the portion 15 of the member 5. This adds to the tension on the spring plate and greatly increases its gripping power. The tips of the prong member 6 and 7 of the member 5 flare outwardly as at 18 (Fig. 4) to facilitate entrance of the button shank or thread into recess 11.

The contour of the improved button cover may take any desired form. For simplicity it is shown in the drawings as of circular form but it may be rectangular or any other desired shape. Similarly the outer surface of the cover portion 1 may be suitably decorated for ornamental purposes. The entire device may be formed of metal which may be gold plated and the spring plate member 5 should be of spring steel or spring brass or similar inherently resilient material. The cover proper may be formed of plastic material and in the light of recent and projected advances in the plastic art the entire device might be made of suitable artificial material such as nylon, polystyrene, polymethyimethacrylate or cellulose acetate. For the present it is preferred to construct the device of spring steel or spring brass and if desired, to plate or coat it with some ornamental metal such as gold, silver, or other substance.

As indicated above, the button cover in accordance with this invention can be made by molding or stamping the component parts in one or two operations from blanks of appropriate metal or other material. In one preferred construction, the improved button cover is formed of two parts each separately stamped out and joined together in one operation. This is illustrated in Figs. 2 to 4 and 6. In Fig. 3 there is shown a plan view of a stamped out cover portion and side walls provided with lugs 19 all of which can be made in one stamping operation. Then in Fig. 4 there is shown the other member composed of the spring plate 5 bearing an arm 15 which in the given example is shown to be of arcuate form to conform with the internal shape of the side wall 2.



The spring plate 5 with arm 15 is attached to side wall 2 as shown in Fig. 2 by bending over the lugs 19 to engage and anchor the arcuate arm 15 near the rim of the side wall 2. Alternatively or in addition the member 5 may be recessed as at 21 (Fig. 4) and an additional or single lug 19 provided for reception therein. Other means can be used to effect this attachment but as shown the arrangement described is effective, simple to perform and cheap to reproduce.

The plate 5 after stamping may be given the desired circular formation by a bending operation as illustrated in dotted lines in Fig. 6 and the top of the rim can be flanged over as at 14, also by a simple operation.

As an alternative to this arrangement, the improved button cover may be stamped out in one single operation from a blank 20 (Fig. 8) which blank has the required cover portion 1 at one end. The shaded part of the blank 20 is removed to leave a unitary piece which may readily be bent into the desired shape illustrated in Fig. 7.

In the claims the reference to a button shank is understood to include attaching thread.

I claim:

1. A cover member consisting of a recessed cap portion, a bifurcated angular spring member rigidly secured to and extending inwardly from one part of the rim of said cap member within said recessed interior thereof, said spring member extending downwardly into said recessed portion and then upwardly toward the opposite rim of said recessed portion, a gap being formed between said opposite rim and said member normally too narrow to admit a button therethrough, said bifurcated spring member being secured to said rim portion by two turned over lugs attached to said rim portion and engaging an arcuate arm extending on each side of said bifurcated spring member.

2. A cover member as defined in and by claim 1 in which said bifurcated spring member is provided with an arm extending inwardly and arranged to fit snugly into said recessed portion of said button cover, said cover and said arm terminating in outwardly flaring coextending end portions.

3. A detachable cover for buttons comprising a cover portion, a peripheral side wall defining an enclosure for a button, a spring plate member extending from one side and ending in a bifurcated portion short of the opposite side of said enclosure, said plate member being bent eccentrically of and toward said cover portion, means for securing said plate member to one side of said side wall, the bifurcated portion of said plate member defining a recessed portion for reception therein of a button shank, and a depending portion extending from the secured end of said plate member into said enclosure and terminating in an outwardly curved fulcrum portion anchoring in the corner formed by said cover portion and said peripheral side wall.

HENRY GROH.


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