March 15, 1960 H. KOEHL 2,928,154

FABRIC COVERED ARTICLES

Filed April 1, 1955

FIG. 1

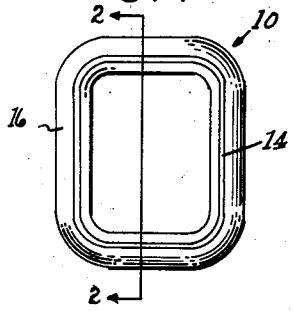


FIG. 2

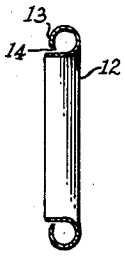


FIG. 3



FIG. 4

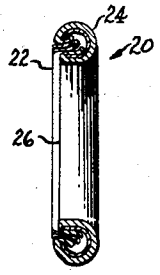


FIG. 5

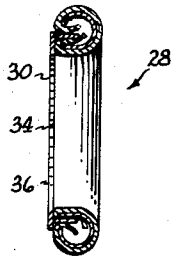


FIG. 6

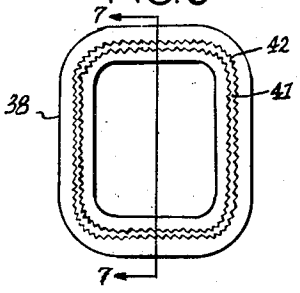


FIG. 7

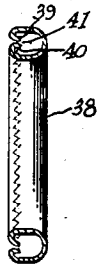


FIG. 8

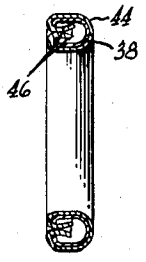


FIG. 9

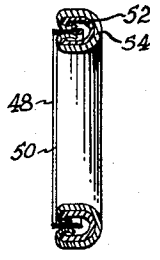


FIG. 10

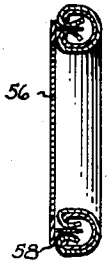


FIG. 11

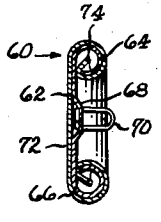


FIG. 12

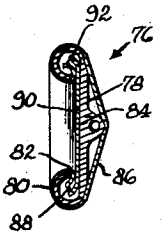
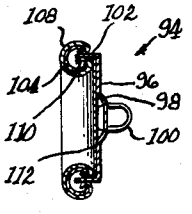


FIG. 13



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FABRIC COVERED ARTICLES

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Application April 1, 1955, Serial No. 498,716

4 Claims. (Cl. 24—184)

This invention relates to covered articles and particularly relates to fabric covered buckles, buttons and similar articles.

Buckles, buttons and the like have, generally heretofore been covered by a fabric which has either been glued to the face of the article to be covered or has been attached thereto by means of providing hook-like teeth on the article around the periphery of the rear face thereof, and hooking the ends of the fabric, which have been drawn around the front face, into such teeth. In order to prevent the cover from slipping off the article, a backing plate was generally used to lock the fabric in position.

The above covering methods, however, have certain disadvantages, one of the most serious of which is the fact that the article can only be covered on one face, when using the backing plate; whereas, when using the gluing method, the glue invariably tends to dry and to disintegrate, resulting in the covering material falling away from the article.

It is, therefore, one object of the present invention to provide a method for covering articles with a fabric whereby all surfaces of the article are substantially covered.

Another object of the present invention is to provide a method of covering articles with a fabric material whereby the covering is securely held in place at all times.

Another object of the present invention is to provide a method of covering an article with fabric material wherein the covering may comprise a plurality of colors.

Another object of the present invention is to provide a fabric covered article which is easy and inexpensive to produce and wherein the covering is not apt to become loose during usage.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

Fig. 1 is a rear elevational view of a buckle frame embodying the present invention wherein the slot is offset toward the inner periphery of the frame.

Fig. 2 is a cross-sectional view of the buckle frame of Fig. 1 taken on line 2—2 of Fig. 1.

Fig. 3 is a cross-sectional view similar to that of Fig. 2, except that the frame is covered.

Fig. 4 is a cross-sectional view similar to Fig. 3 except that a fabric insert which may be of a different color than the cover, is inserted in the slot.

Fig. 5 is a cross-sectional view, similar to Fig. 4, but showing a rigid insert substituted for the fabric insert of Fig. 4.

Fig. 6 is a rear elevational view of a buckle frame similar to Fig. 1, but showing a toothed slot which is provided in the center of the frame.

Fig. 7 is a cross-sectional view of the buckle frame of Fig. 6.

Fig. 8 is a cross-sectional view similar to Fig. 7 but showing a cover applied to the frame, this view being taken on line 8—8 of Fig. 6.

Fig. 9 is a cross-sectional view, similar to that shown in Fig. 8, but showing a fabric insert in the slot defined by the toothed edges of the buckle frame.

Fig. 10 is a cross-sectional view, similar to Fig. 9, but showing a rigid insert in the slot.

Fig. 11 is a cross-sectional view of a covered button embodying the present invention.

Fig. 12 is a cross-sectional view of a second type of covered button embodying the present invention.

Fig. 13 is a cross-sectional view of a third type of covered button embodying the present invention.

Referring now in greater detail to the figures of the drawings wherein similar reference characters refer to similar parts, Figs. 1, 2 and 3 show a preferred embodiment of the invention comprising a buckle **10** having a generally tubular frame **12**, formed from a spring metal sheet, one edge **13** of which is bent toward the other edge to form a narrow slot **14** at the rear of the frame. A fabric cover **16** is pulled tightly around the frame **12**, and the ends **18** of the cover are inserted through the slot **14**. The resilience of the bent edge **13** acts to urge this bent edge into slot closing position. As a result, the cover material which has been inserted in the slot is caused to jam therein if an attempt is made to pull the material out. This holding or gripping action of the bent edge **13** is a highly important aspect of the present invention.

In the above manner, the cover is maintained in fixed position on the frame and covers substantially the entire cross-sectional periphery thereof, except for the narrow slot **14** at the rear. Although the cover **16** has been described as being a "fabric" cover, the term "fabric" is here used generically to apply not only to a textile material but also to leather, plastic and other types of similarly flexible material.

In Fig. 4 there is shown a buckle **20** which is substantially similar to that of Figs. 1, 2 and 3, except that a strip of material **22** is doubled up and inserted within the slot **26**. The protruding edges of the strip of material **22** may then be shaved down so that they lie in substantially the same peripheral plane as the cover **24**, which is similar to the cover **16**. In this manner the slot **26** may be completely closed by the clamped-together edges of the strip **22**.

In Fig. 5 there is shown a cross-sectional view of a buckle **28** which is similar to that shown in Fig. 4 in every respect except for the fact that a rigid insert **30** having a flange **32** is substituted for the insert **22**. This rigid insert may be made of metal, plastic, or the like, and is so constructed that the flange **32** fits within the slot **34** to maintain the face portion **36** of the insert rigidly positioned on the periphery of the device.

It should be noted that inserts **26** and **30** may be either the same as the color of the cover member or, if desired, they may be of any other contrasting or harmonizing color. In this manner, a two-tone effect may be obtained which is not readily obtained by the prior covering methods.

In Figs. 6, 7 and 8 there are illustrated the cross-sectional views of a modified form of buckle wherein the metallic frame **38** is U-shaped in cross section and wherein the resilient legs **39** and **40** of the cross-sectionally U-shaped frame are bent diagonally inward and toward each other to define a slot **41**. The edges of the legs are toothed, as indicated at **42**. As shown in Fig. 8, a fabric cover **44** is drawn tightly around the frame **38**, with the ends **46** of the cover inserted within the slot **41**, and are rigidly fixed therein not only by the clamping action of

the flexible metal edges of the slot but also by the gripping action of the teeth 42. Also, as indicated in Fig. 8, the construction and arrangement of the legs 39 and 40 is such that they possess the additional tendency to lock against each other if a pulling force is exerted in the direction of the V-axis.

Fig. 9 corresponds to Fig. 8 in the same way as Fig. 4 corresponds to Fig. 3; that is, the device of Fig. 9 is similar to that of Fig. 8 except that a fabric insert 48 is inserted in the slot 50 of the frame member 52. The insert 50 may also be either the same or a different color from that of the cover member 54.

Fig. 10 shows the same construction as Fig. 9 except that a rigid insert 56 having a flange 58 is substituted for the flexible insert 50.

Figs. 11, 12 and 13 show three different variations of the present invention as applied to fabric-covered buttons.

In Fig. 11 a button 60 is shown, this button comprising a spring metal disc 62 which is circular in shape. The disc 62 is provided with an annular flange 64 at the rear portion thereof, this flange 64 being arcuately curved to form an annular slot 66 between the rear face of the disc and the end of the flange. The central portion of the disc is provided with a concave recess 68 in which is fixed the ends of an eyelet 70. A fabric covering material 72 is stretched over the front face of the disc and is then pulled around the annular flange 64, and the edge 74 of the cover is then inserted into the slot 66 where it is clampingly maintained between the rear face of the disc and the edge of the annular flange. In this manner a generally concave button is provided which is completely covered on all exposed parts.

In Fig. 12 a button 76 is shown; this button 76 comprising a circular disc 78 having an annular flange 80 on the front face thereof, as distinguished from Fig. 10 where the flange is on the rear face of the button. The annular flange 80 is arcuately curved, similarly to flange 64, and forms a slot 82 between the front face of the disc and the edge of the flange. The rear face of the disc is provided with an integral eyelet 84. A cover member 86 is drawn around the rear of the button and the edge 88 of the cover 86 inserted into the slot 82 where it is clampingly retained. A circular piece of material 90 is pressed against the front face of the disc 78 and the annular edge 92 of this material 90 is inserted into the slot 82 where it is also clampingly retained. In this manner the button is completely covered both at the front and rear. In such a construction, openings are preferably provided in the rear portion of the cover in line with the eyelet 84.

In Fig. 13 there is shown a button 94 which comprises a generally rectangular disc 96. This disc 96 is provided with a concave portion 98 in the center and an eyelet 100 having its ends fixed to the concave portion. An annular flange 102, which is of flat cross section, extends forwardly from the disc 96. An annular ring 104, made of spring metal or the like, and having an arcuately shaped cross-sectional contour which defines a slot 106, is clampingly connected to the flange 102 by means of inserting the flange 102 within the slot 106. A fabric cover 108 is drawn tightly around the ring 104 and the edges 110 of this cover are clampingly secured within the slot 106. A front covering panel 112 is provided against the front face of the disc 96 and is maintained in position thereon by means of inserting the edges thereof between the ring 104 and the front face of the disc 96. This two-part button construction permits the eyelet on the rear face of the button to be maintained in exposed position. Furthermore, it is much simpler and less expensive to stamp out the separate ring and disc than to form the parts integrally. It should be noted that both of the front covers 90 and 112 may be constructed either of flexible or of rigid material, and may be either of the same or different colors relative to the other portions of the covering material.

What is claimed is:

1. An article incorporating means for attaching a fabric sheet about its outer surface comprising a tubular frame made of resilient material, the wall of said frame being separated to provide a very narrow preformed slot passing through the surface of said tubular frame so that the walls bounding said slot are almost in contact with each other, said slot being disposed substantially parallel to the side walls of said frame and extending completely along the entire length of said frame, the terminal portions of said walls bounding said slot being inclined within said slot towards each other and toothed in a manner which causes the points of said teeth to form at least one boundary of said slot for facilitating the introduction of the ends of said fabric within said slot and for grasping fabric inserted therein, and the width of said slot being narrow enough to permit the resiliency of said frame and said teeth to exert a clamping action upon a sheet of fabric when it is looped about said article and its ends are forcefully inserted through and within said slot whereby said fabric is securely fastened about said article.

2. An article as set forth in claim 1 wherein both of said terminal portions are toothed.

3. An article as set forth in claim 1 wherein said tubular frame is formed in a closed continuous shape.

4. An article as set forth in claim 2 wherein said closed continuous shape is substantially rectangular with rounded corners to provide a form for a buckle.

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