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[54] **DECORATIVE SHIELD OR BUTTON ASSEMBLY**

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[52] **U.S. Cl.** ..... **24/94,** 24/95, 24/113 MP, 85/39

[51] **Int. Cl.** **A44b 1/42**

[58] **Field of Search** ..... 24/95, 94, 90 F, 24/101 FS, 101 R, 90 C, 213 B, 214, 216, 217, 220; 85/39

[56] **References Cited**

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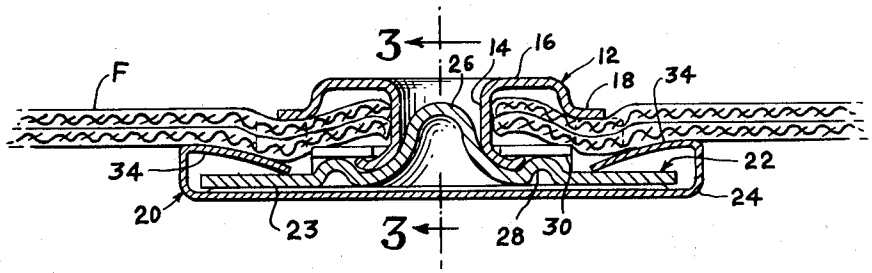
[57] **ABSTRACT**

Assembly includes one-piece deflector plate-retaining means in which attaching eyelet is rolled outward to make assembly secure.

2 Claims, 5 Drawing Figures



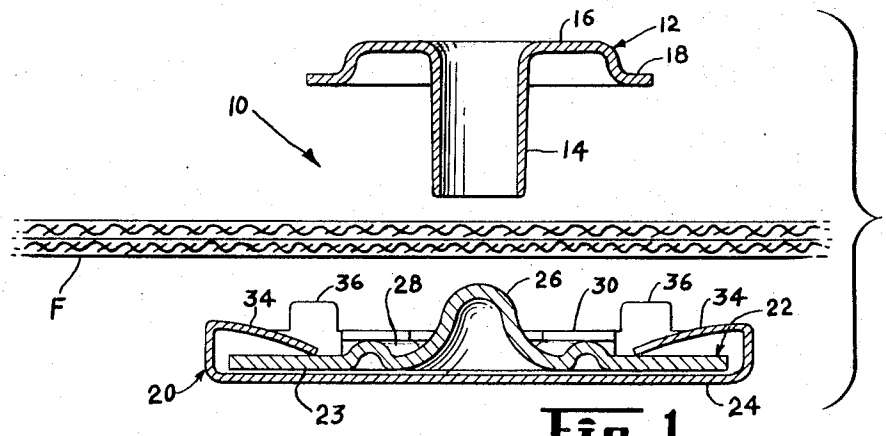


Fig. 1.

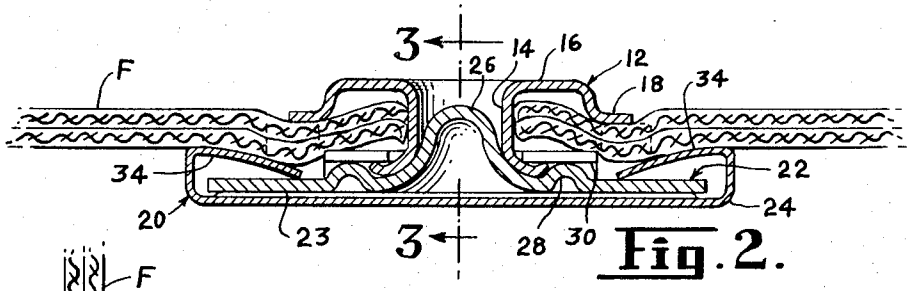


Fig. 2.

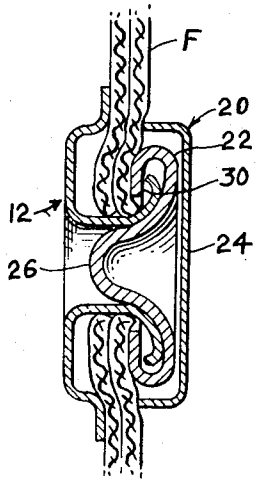


Fig. 3.

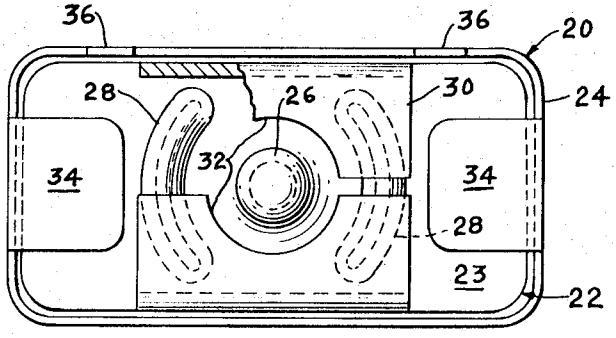


Fig. 4.

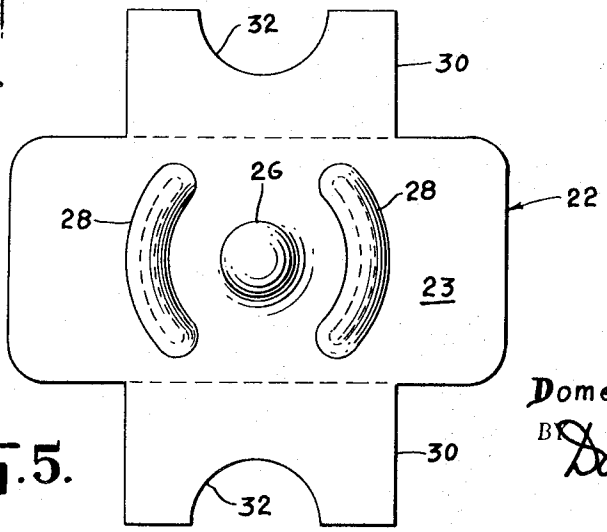


Fig. 5.

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DECORATIVE SHIELD OR BUTTON ASSEMBLY

This invention relates to a decorative shield or button assembly. More specifically, this invention relates to such an assembly wherein an essential part is a one-piece deflector plate having means for both deforming the end of an eyelet and holding the deformed end to secure the assembly together.

BACKGROUND OF THE INVENTION

In the past, it has been common to attach a decorative shield or button to fabric by means of an eyelet deformed about a knob or mount on the button head. Such structures have invariably included a retaining washer or the like secured in the button head which has held the flared end of the eyelet to keep the assembly together. Such assembly, for instance, is shown in the old U.S. Pat. 298,154, patented May 6, 1884. Such multi-piece structures have had their disadvantages: because the retaining washer and the button head have been separate pieces, separate stocking and much additional manual handling have been required.

SUMMARY OF THE INVENTION

In the present invention, there is provided in a single piece, a combination deflector plate and retaining means thus making stocking of separate parts unnecessary and reducing the handling and number of operations in the assembly.

Other objects of the invention will be apparent from the following specification including the drawings wherein is described and shown a non-limiting form of the invention. In the drawings:

FIG. 1 is an exploded sectional view showing the parts of an assembly embodying the invention prior to assembly;

FIG. 2 is a sectional view showing the parts after assembly;

FIG. 3 is a sectional view taken on the line 3—3 of FIG. 2;

FIG. 4 is a top view of the deflector plate-shell subassembly shown in FIG. 1; and

FIG. 5 is a top view of a deflector plate blank partially formed prior to incorporation in the sub-assembly shown below the fabric in FIG. 1.

Referring more specifically to the drawings, the parts of the assembly, prior to the installation, are shown in FIG. 1 and generally designated **10.** The assembly comprises an eyelet **12** including a barrel **14** connected at its trailing end to an outward annular flange **16.** The outward margin of the flange may be stepped downward as at **18,** as shown.

The assembly also comprises a deflector plate shell subassembly **20** which in turn includes a deflector plate **22** stamped from sheet metal. A decorative shell **24** covers the underside of the deflector plate as shown in FIG. 1.

The deflector plate **22** includes a base panel **23** having a raised dome **26** spaced inward from its margins. Spaced outward from the dome are arcuate ribs **28** extending upwardly. Preferably, these ribs are concentric with the dome **26.** Lateral extensions **30** (FIG. 5) of the

base panel **23** are, in an early stage of assembly, folded up (FIG. 1) and doubled back to engage the upward spacing and stiffening ribs **28.** As shown (FIG. 5), the distal ends of the extensions **30** are formed with arcuate cut-outs **32** to permit, after the folding and doubling back, a clearance about the dome (FIG. 4).

Completing the sub-assembly, end tabs **34** on the shell **24** are bent over against the top surface of the deflector plate (FIG. 2) to secure these two elements together. As shown, the shell includes marginal upward flange portions which retain the shell against lateral shifting, and also upwardly extending registering tabs **36.** The tabs are useful in handling the shells to provide proper orientation during imprinting and assembly and also serve as anti-turning means once the assembly is installed on fabric.

In the installation process, the fabric F is brought between the plate-shell sub-assembly and the eyelet **12.** The eyelet and sub-assembly are then brought togehter, the leading end of the eyelet barrel **14** piercing the fabric F. As the leading end of the barrel **14** engages the outwardly sloping sides of the dome **26,** the end is rolled outward (FIG. 2) until it preferably engages the spacing ribs **28** which roll the leading edges of the eyelet barrel upward as shown, into engagement with the underside of the lateral extensions **30** which become retaining means for the assembly.

The tight assembly, as shown in FIG. **2,** assures a sturdy attachment of the parts together and to the fabric, and provides an effective holding means utilizing a minimum number of parts. In this connection, it should be clear that, aside from attaching a shield to fabric, the assembly may be used as a conventional rivet and burr holding layers of fabric together.

Variations within the scope of the invention are possible, all falling within the following claim language.

I claim:

1. A decorative shield or button assembly comprising:

a. a one-piece rectangular deflector plate having a central upward raised dome spaced inward from its sides, upward spacing ribs formed in the plate spaced outward from the dome, extensions on opposite sides of the plate, the extensions being folded up and doubled back against the ribs, the ends of the extensions having arcuate cutouts, leaving an annular opening between the dome and the edges of the cutouts;

b. an eyelet having a barrel with an outward flange at its base, the leading end of the barrel extending down over the dome and engaging the sloping sides of the dome and extending outward against the plate at the base of the dome and engaging the ribs and the underside of the doubled-back extensions to attach the eyelet to the plate; and

c. a covering shell covering the underside of the plate and folded upward and over margin portions of the plate.

2. A decorative shield or button assembly as claimed in claim **1** wherein the spacing ribs are arcuate and concentric about the dome.

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