United States Patent

Mukai et al.

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[45] **Oct. 3, 1972**

[54] **PICTURE FRAME**

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[52] **U.S. Cl.**.....**40/152**

[51] **Int. Cl.**.....**G09f 1/12**

[58] **Field of Search**.....40/152, 152.1, 154, 156, 10

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[57] **ABSTRACT**

This invention relates to a picture frame having an at least partially transparent face plate, with bent edges which resiliently engage a back plate so that a picture to be enjoyed may be held between said face plate and said back plate.

3 Claims, 7 Drawing Figures

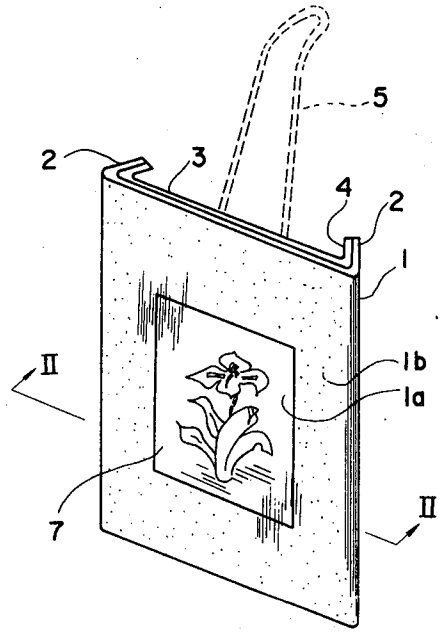


FIG. 1

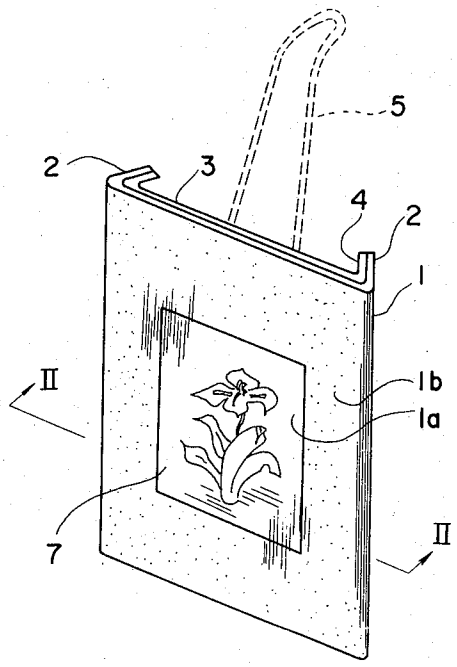


FIG. 2

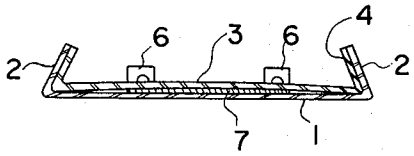


FIG. 3

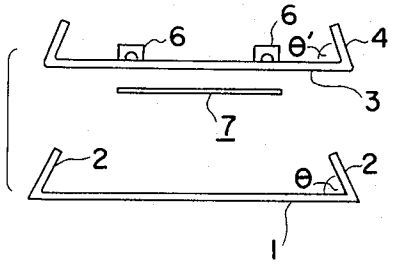


FIG. 4

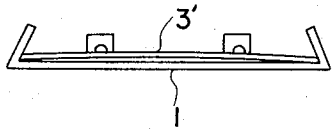


FIG. 5

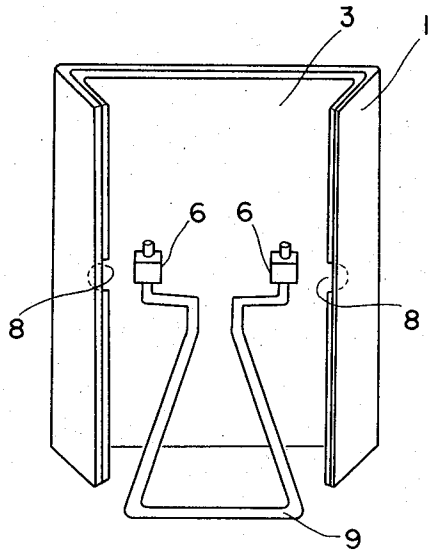


FIG. 6

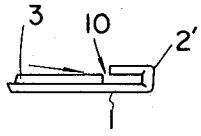
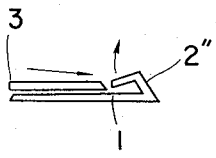


FIG. 7



PICTURE FRAME

SUMMARY OF THE INVENTION

This invention relates to a picture frame.

The primary object of the invention is to provide a picture frame having a face plate which is at least partially transparent and has bent edges, whose elasticity makes it possible to hold a picture or the like to be enjoyed between said face plate and a back plate.

Another object of this invention is to provide a picture frame characterized by provision of two plates to hold a picture or the like which are engaged by bending back the edges of both plates.

Still another object of this invention is to provide a picture frame having a face plate, both edges of which are bent inward so that the plate, though actually thin, may appear thick, and which permits the whole object fitted in the frame to be viewed.

Other objects of this invention will become apparent from the following description of several representative embodiments.

FIG. 1 is an oblique view of one embodiment of this invention;

FIG. 2 is a sectional view taken along the line II—II of FIG. 1;

FIG. 3 is an end view of the embodiment of FIG. 1, shown disassembled;

FIG. 4 is an end view of another embodiment;

FIG. 5 is a back view of yet another embodiment; and

FIGS. 6 and 7 respectively are partial end views of still further embodiments, showing only the edges of the face plate.

In FIGS. 1–3, the face plate 1, is made of plastic material, with one part 1*a* transparent and the other part 1*b* semi-transparent. Its front and rear surfaces are roughened. Of course the face plate 1 as a whole can be made either transparent or semi-transparent. Both edges 2, 2 of the face plate 1 are bent backward to give the appearance of thickness. The back plate 3 is made of transparent or colored opaque plastic material; and both edges 4, 4 of the back plate 3 are also bent backward. Both edges 2, 2 of the face plate 1 are bent at an angle θ slightly smaller than the angle θ', at which both edges 4, 4 of the back plate 3 are bent. The outside width of the flat area of the back plate 3 is equal to the inside width of the face plate 1. To the back side of the back plate 3 are attached by an adhesive agent flanges 6, 6 which have holes or slits to receive a string 5, (FIG. 1) or to fit support means 9 (FIG. 5).

A picture or other object to be enjoyed 7 is mounted on the back side of the face plate 1. The flanges formed by the two edges 2, 2 of the face plate 1 are pushed apart and the back plate 3 is applied to the back side of the face plate 1. Then the elasticity of the flanges formed by the edges 2, 2 of the face plate 1 compresses the flanges formed by the edges of the back plate 3, and the object of enjoyment 7 is gripped between the face plate 1 and the back plate 2. The roughened rear surface of the back plate improves the grip on the object 7.

In another embodiment illustrated in FIG. 4, the structure of the face plate 1 remains the same, but the back plate 3′ is a flat plate with both edges beveled. In this embodiment the back plate 3′ can be made not only of plastic, but also of wood or paper-board.

In still another embodiment illustrated in FIG. 5, the structures of the face plate 1 and the back plate 3 are the same as that in FIG. 1, but one edge of the back plate 3 is notched 8, 8 to provide a finger-hold on the bent part of the face plate when separating the assembly of face plate and back plate. Instead of a string 5, a support member 9 is attached to the flange 6.

Using a string 5, you can hang the frame on the wall; and using a support member 9, you can stand the frame on the desk.

When the back plate 3 is a flat plate, both edges 2′ of the face plate 1 are, as indicated in FIG. 6, bent inwardly at right angles to create a space 10 between the back side and the edges 2′ of the face plate 1.

The back plate 3 is slightly thicker than the width of this space 10 and can be held in this space 10 by virtue of the elasticity of the edges 2′.

Alternatively, as illustrated in FIG. 7, both edges 2″ of the face plate may be bent at acute angles so that the back plate 3 can be held by the elastic edges 2″ of the face plate.

In FIG. 1, one frame is shown holding one picture, but it goes without saying that several pictures may be arranged in one frame.

When both the face plate and the back plate are transparent, a several number of pictures can be held at a time in the frame and moreover those pictures are seen in a distance away from the wall or the like, even seen from the front. Furthermore both bent edges are also seen and give cubic appearance.

By utilizing my invention a picture or the like can be elastically gripped without slipping between the edges of the face plate and the back plate and the entire picture can be enjoyed, unlike the conventional frame which hides partially the picture. Moreover, in spite of the frame being composed of thin plates, the frame looks thick because of the bent edges of the face plate, thereby producing a noble effect and simplifying the manufacture and use of the frame.

What is claimed is:

1. A picture frame comprising, an at least partially transparent plastic face plate having only two opposed edges bent backward at an acute angle to form substantially straight flanges, a plastic back plate dimensioned to fit against the rear of said face plate, said back plate likewise having two opposed notched edges bent backward to form flanges fitting between the flanges of said face plate, in which the angle θ between the flanges on said face plate and a principal surface of said face plate is slightly smaller than the angle θ' between the flanges on said back plate and a principal surface of said back plate whereby the flanges of said face plate compress inwardly the flanges of said back plate, and an object to be exhibited which is positioned between said face plate and said back plate is gripped therebetween due to the pressure exerted by the flanges of said face plate on the flanges of said back plate.

2. A picture frame as claimed in claim 1, in which the face plate is wholly transparent.

3. A picture frame as claimed in claim 1, in which both the face plate and the back plate are transparent.

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