Dec. 8, 1970 G. E. NICHOLS 3,545,115

PHOTOGRAPH FRAME

Filed June 28, 1968 2 Sheets-Sheet 1

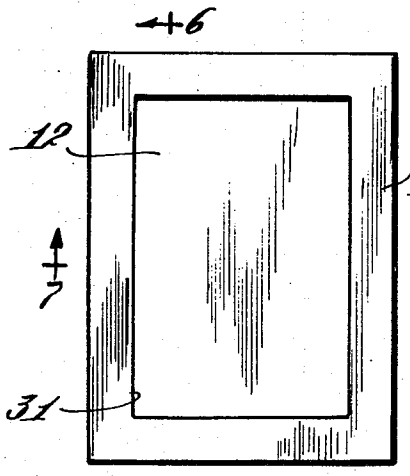


Fig. 1

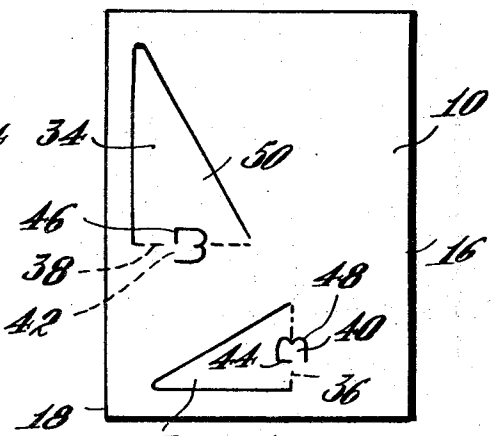


Fig. 2

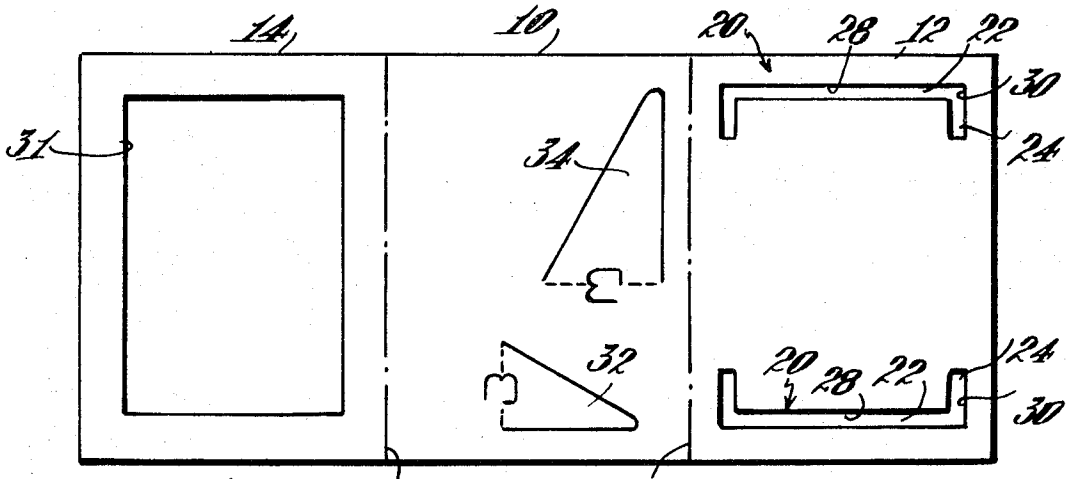


Fig. 3

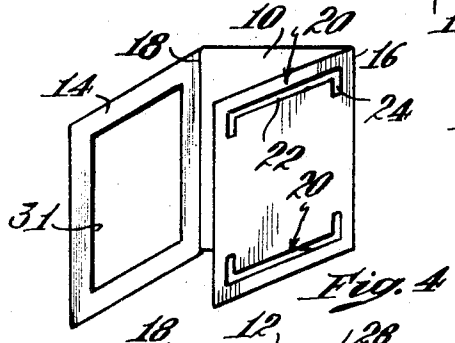


Fig. 4

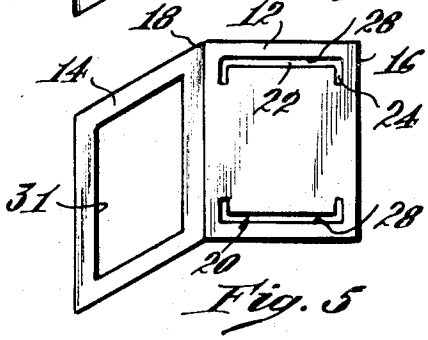


Fig. 5

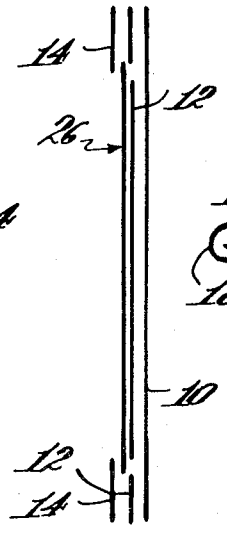


Fig. 6



Fig. 7a

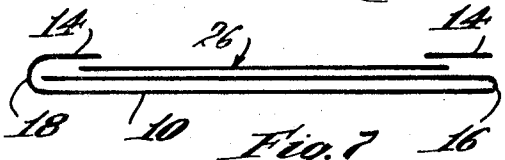


Fig. 7

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PHOTOGRAPH FRAME

Filed June 28, 1968 2 Sheets-Sheet 2

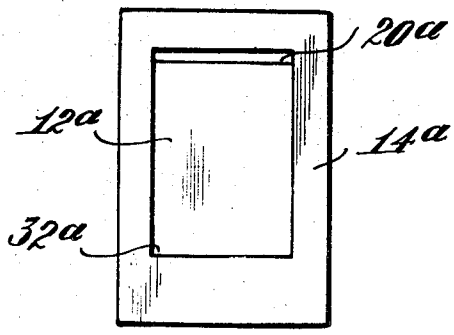


Fig. 8

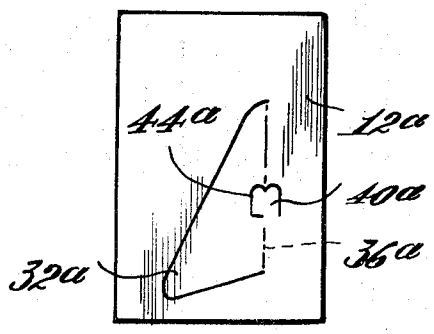


Fig. 9

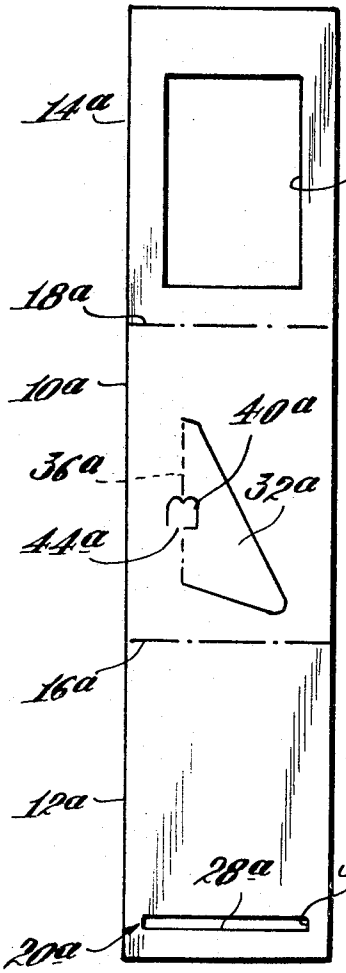


Fig. 10

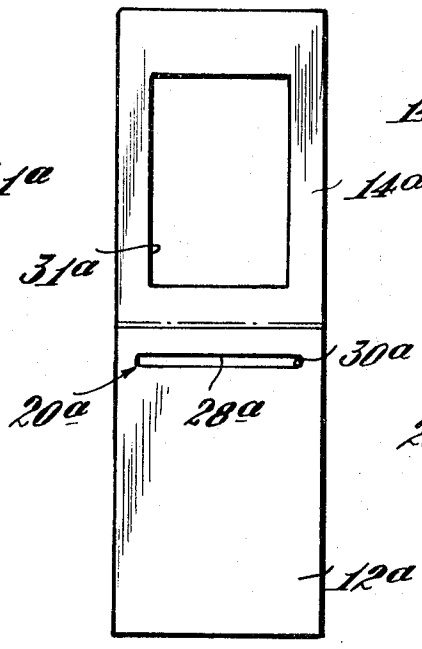


Fig. 11

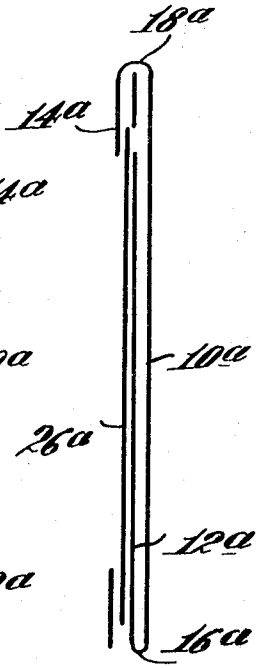


Fig. 13

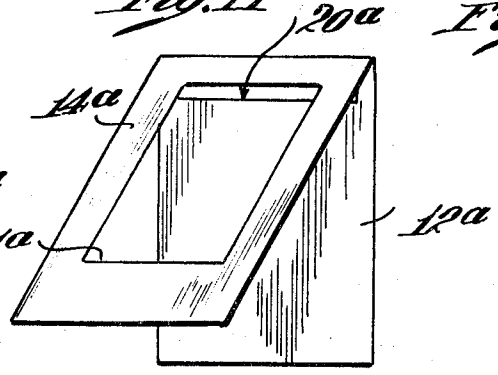


Fig. 12

United States Patent Office 3,545,115 Patented Dec. 8, 1970

3,545,115

PHOTOGRAPH FRAME

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Filed June 28, 1968, Ser. No. 741,136
Int. Cl. G09f 1/12
U.S. Cl. 40—152.1 2 Claims

ABSTRACT OF THE DISCLOSURE

A composite frame for holding a photograph or the like comprising back, intermediate and front plies hinged to each other so that when folded the intermediate ply lies between the back and front plies and wherein the intermediate ply contains a slot for engagement with an edge of the photograph to hold it against lateral displacement and the front ply contains a window opening through which the photograph can be seen.

BACKGROUND OF THE INVENTION

Picture frames or mounts for holding photographs embodying two or more hinged panels, one or more of which contain a window opening are shown, for example, in such United States Pats. as Clarke 2,834,135, Kiehl, 2,834,136, Blevens, 2,782,542, Matthias, 2,889,646, Sames, 2,253,814 and others. Widder, 2,568,178 shows slots for receiving the corners of a photograph to hold it in place. The picture mounts shown in the foregoing patents are relatively complicated, requiring the performance of several distinct operations in their manufacture and some manual assembly. The purpose of this invention is to provide a picture mount of such construction that in its manufacture the cutting, creasing and application of adhesive may be performed in a single operation with a die-cutting and glue-applying machine; to provide a structure which is more economical of material; to provide a structure in which the photograph may be easily mounted without adhesive or other fastening means; to provide a mount in which the photograph will be held in place without permanent damage to its edges and/or its corners; and to provide a structure which is attractive.

SUMMARY

As herein illustrated, the frame comprises a back ply, a face ply containing a window opening and an intermediate ply situated between the back and face plies, said intermediate ply containing a transverse slot adjacent the upper end of the window opening. The upper edge of the aforesaid slot provides a transverse shoulder and the front ply holds the photograph against the intermediate ply with its upper edge abutting the aforesaid shoulder thus constraining longitudinal displacement of the photograph. The back ply is connected by hinge means to one edge of the intermediate ply and at its opposite edge to the front ply so that when the plies are disposed in engagement with each other the distal edge of the intermediate ply coincides substantially with the hinge means connecting the front and back plies and the distal edge of the front ply coincides with the hinge means connecting the back and intermediate plies. The slot in the intermediate ply has at its opposite ends right-angularly disposed,

longitudinally extending portions providing spaced parallel shoulders, the distance between which corresponds to the width of the photograph and these shoulders, by engagement with the edges of the photograph, prevent transverse shifting of the photograph between the front and intermediate plies. There may be slots at one or both ends of the intermediate ply and the front and intermediate plies may be connected to the opposite longitudinal edges of the back ply or to the opposite transverse edges of the back ply.

The invention will now be described in greater detail with reference to the accompanying drawings wherein:

FIG. 1 is a plan view of the face of one form of the frame;

FIG. 2 is a plan view of the back of the frame;

FIG. 3 is a plan view of the blank of which the frame is comprised prior to folding;

FIG. 4 is a perspective view of the blank partially folded;

FIG. 5 is a perspective view showing the intermediate ply folded into engagement with the back ply;

FIG. 6 is a diagrammatic section taken on the line **6—6** of FIG. 1 with the plies spaced apart, showing a photograph mounted against the intermediate ply with its ends abutting the shoulders at the outer sides of the slots in the intermediate ply;

FIG. 7 is a diagrammatic section taken on the line **7—7** of FIG. 1 with the plies spaced apart, showing the plies connected to each other and a photograph disposed between the intermediate and front plies;

FIG. 7*a* is a fragmentary section through a hinge;

FIG. 8 is a plan view of the face of an alternative form of the frame;

FIG. 9 is a back view of the frame shown in FIG. 8;

FIG. 10 is a plan view of the blank of which the frame is comprised prior to folding;

FIG. 11 is a plan view of the blank partially folded with the intermediate ply in engagement with the back ply;

FIG. 12 is a perspective view with the intermediate ply folded against the back ply and the front ply partially folded; and

FIG. 13 is a diagrammatic section taken on the line **13—13** of FIG. 8 with the plies spaced apart, showing a photograph mounted against the intermediate ply with one end abutting the shoulder at the outer edge of the slot in the intermediate ply.

Referring to the drawings, the frames in one form as shown in FIGS. 1 to 7, inclusive, comprises a back ply **10**, intermediate ply **12** and a front ply **14**. The back ply is connected along one of its longitudinal edges to one of the longitudinal edges of the intermediate ply by a hinge **16** and the front ply is connected along one of its longitudinal edges to the other longitudinal edge of the intermediate ply by a hinge **18**. The frame is comprised of paperboard and the hinges **16** and **18** may be formed by creasing, embossing, perforating and the like.

The intermediate ply **12** has near its top and bottom transverse edges slots **20**, each comprising a narrow transversely extending portion **22** at the ends of which are longitudinally extending portions **24**. The intermediate ply is adapted to be folded into engagement with the back ply as shown in FIG. 5 and the slots **20** are adapted to receive the opposite ends of a photograph **26** (FIG. 6) with the end portions bent backwardly from the front face of the

intermediate ply **12** into the slots so that the ends of the photograph abut the outer edges of the portions **22** of the slots. The outer edges constitute shoulders **28** which, by abutting engagement with the ends of the photograph, prevent longitudinal displacement.

The outer edges of the portions **24** of the slots correspond in spacing to the width of the photograph and provide shoulders **30** which, by abutting engagement with the edges of the photograph, prevent transverse shifting of the photograph.

After the intermediate ply **12** is folded into engagement with the back ply **10** and the photograph **26** mounted against the intermediate ply with its ends and edges engaged with the shoulders **28** and **30**, the front ply **14** which contains a rectangular window opening **31** is folded over the intermediate ply and photograph. Preferably the slots **20** are so located in the intermediate ply as to be concealed by the front ply when the latter is folded into engagement with the intermediate ply.

The hinge means **16** and **18** connecting the plies as shown in FIG. 7*a*, when the plies are folded, forms a crease which pinches the distal edge of the intermediate ply between the back ply and front ply at the hinge **18** thereby pressing the intermediate ply firmly against the back ply throughout its entire area, which pressure will be maintained as long as the front ply is held folded against the intermediate ply. The natural elasticity and resilience of the paperboard of which the frame is comprised and the absence of any fullness at the hinges such as to accommodate the thickness of the distal end of the intermediate ply at the hinge between the back and front plies resists expansion at the hinge and hence provides the aforesaid pressure. The front ply, after the photograph is mounted, is adhesively secured to the intermediate ply. Optionally, however, it may be secured in engagement with the intermediate ply by a pressure-sensitive adhesive or other detachably adherent means so that the front ply can be folded back to permit replacing the photograph with another.

The back ply (FIGS. 2 and 3) contains two easel-type legs **32**, **34** of generally triangular shape cut out along two sides and connected at the third side by hinges **36**, **38** respectively, parallel to the longitudinal and transverse edges so as to be foldable rearwardly from the back to substantially right angular positions with reference thereto. The leg **32** provides support for the frame when resting on one end and the leg **34** provides support for the frame when resting on one side. Locking tabs **40** and **42** cut partly out of the back ply and partly out of the legs in symmetrical relation to the hinges **36** and **38** and in turn foldable rearwardly from the back ply about hinges **44** and **46** and containing notches **48** and **50** provide for holding the legs in rearwardly disposed positions.

An alternate form of the frame is shown in FIGS. 8 to 13, inclusive. In this form the frame comprises a back ply **10***a*, an intermediate ply **12***a* and a front ply **14***a*. The intermediate ply **12***a* is connected at one of its transverse edges to one of the transverse edges of the back ply **10***a* by a hinge **16***a* and the front ply **14***a* is connected at one of its transverse edges to the other transverse edge of the back ply **10***a* by a hinge **18***a*.

The intermediate ply **12***a* contains adjacent its distal end a narrow, transversely extending slot **20***a* which provides at its outer side a shoulder **28***a* and at its ends shoulders **30***a*. When the intermediate ply **12***a* is folded into engagement with the back ply **10***a*, as shown in FIG. 11, and a photograph **26***a* is placed against the intermediate ply with an end bent into the slot **20***a*, the shoulder **28***a*, by abutting engagement with the end of the photograph, prevents longitudinal displacement and the shoulders **30***a*, by abutting engagement with the sides of the photograph, prevents transverse displacement.

The front ply **14***a* contains a window opening **31***a* so that when folded over the intermediate ply and the photograph mounted thereon the photograph can be seen. As

related with respect to the form of the invention shown in FIGS. 1 to 7, inclusive, the hinged relation of the plies is such that folding the front ply into engagement with the intermediate ply pinches the distal end of the intermediate ply situated at the hinge between the back and front plies. This in turn applies pressure to the edge of the photograph which extends into the slot **20***a* so as to hold it securely in place. As related above, the front ply may be permanently or detachably secured against the intermediate ply. Preferably the upper edge of the window opening in the front ply overlaps the upper edge of the slot **20***a* in the intermediate ply and that portion of the front ply above the upper edge of the slot is adhesively secured to the intermediate ply. The front ply thus may be lifted away from the intermediate ply and the upper edge of the photograph pushed beneath the overlapping portion of the front ply. As thus constructed, the front ply need not be additionally secured to the intermediate ply to hold the photograph in place.

The back ply **10***a* (FIG. 9) contains an easel-type leg **32***a* cut out of the back and foldable about a hinge **36***a* parallel to a longitudinal edge of the back ply so as to be foldable rearwardly with respect to the back ply to a position substantially at right angles thereto for supporting the frame on one end. A locking tab **40***a* cut partly out of the back ply and partly out of the leg and foldable about a hinge **44***a* substantially parallel to the transverse edge provides for locking the leg in an operative position. Although only one leg is shown in this form two legs may be employed in the same fashion and for the same purpose as disclosed in the form of the frame shown in FIGS. 1 to 6, inclusive.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all modifications and equivalents falling within the scope of the appended claims.

I claim:

1. A composite frame for holding a photograph or the like comprising three substantially rectangular plies of corresponding area disposed in parallel relation to each other, said plies constituting, respectively, a front panel containing a photograph opening of predetermined size, an intermediate panel constituting positioning and supporting means for a photograph disposed between it and the front panel to hold the photograph centered with respect to the opening in the front panel, and a back panel for concealing the rear side of the intermediate panel and portions of the photograph projecting therethrough, hinge means at one edge of the back panel connecting one edge of the front panel thereto, and hinge means at the opposite edge of the back panel connecting one edge of the intermediate panel thereto, said intermediate panel containing longitudinally spaced, transversely extending openings having spaced parallel edges defining open slots in said panel into which the opposite ends of a photograph placed against the intermediate panel between the open slots may be depressed, said open slots being so positioned with respect to the opening in the front panel as to be concealed by said front panel and so that the distance between the more remote of the edges of the open slots correspond substantially to the longitudinal dimension of the photograph so that the ends of a photograph engage said end edges, and said front panel operates to hold the end edges of the photograph in abutting engagement with said remote edges of the open slots.

2. A composite structure according to claim **1**, wherein the transversely extending open slots correspond in length to the width of the photograph to be placed in the frame, and wherein there are longitudinally extending openings at the opposite ends of the transversely extending open slots, said longitudinally extending openings extending from the respective transversely extending open slots toward each other and defining transversely spaced parallel edges, the distance between the more remote of said edges

corresponding to the width of the photograph, with which the transversely spaced edges of the end portions of a photograph depressed into said longitudinally spaced open slots abut and are held by the front panel.

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U.S. Cl. X.R.

40—124.1