March 5, 1963 C. N. CROSS 3,079,715

WELL STRUCTURE FOR DISPLAY MOUNTS

Filed Jan. 5, 1961 2 Sheets-Sheet 1

Fig. 1.

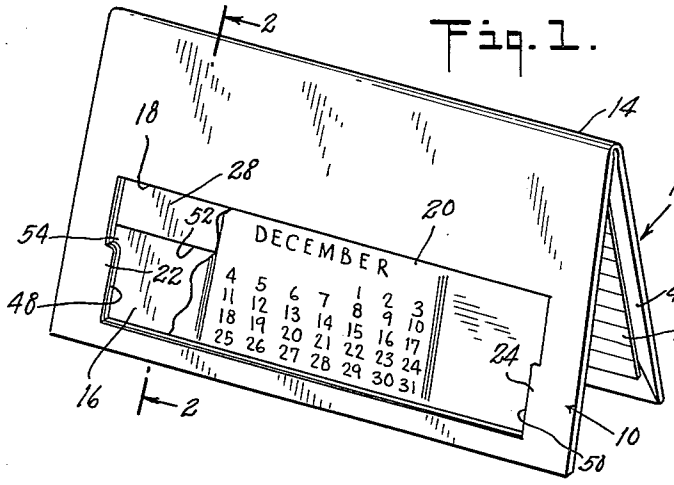


Fig. 2.

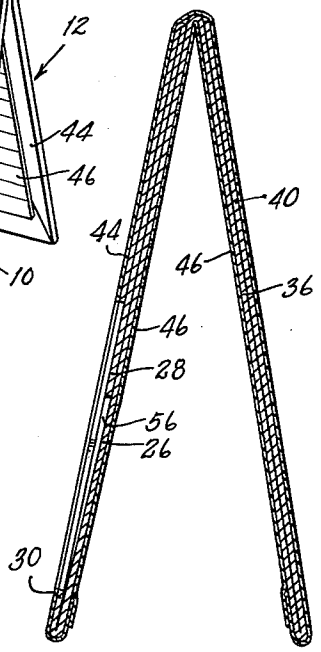
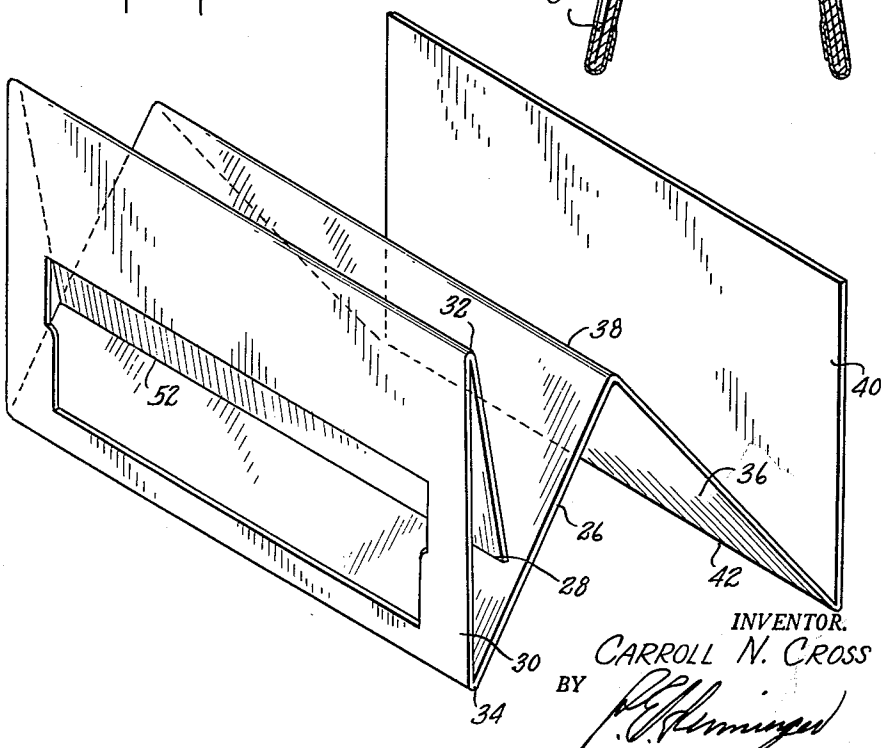


Fig. 3.



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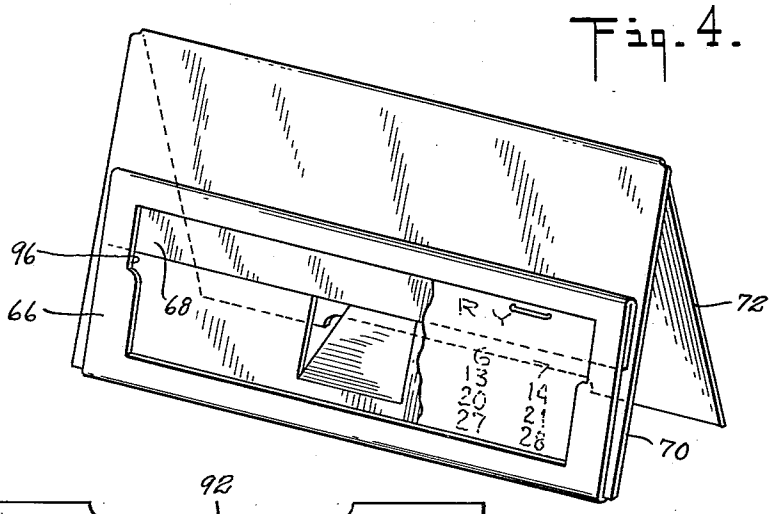
Filed Jan. 5, 1961 2 Sheets-Sheet 2

Fig. 4.



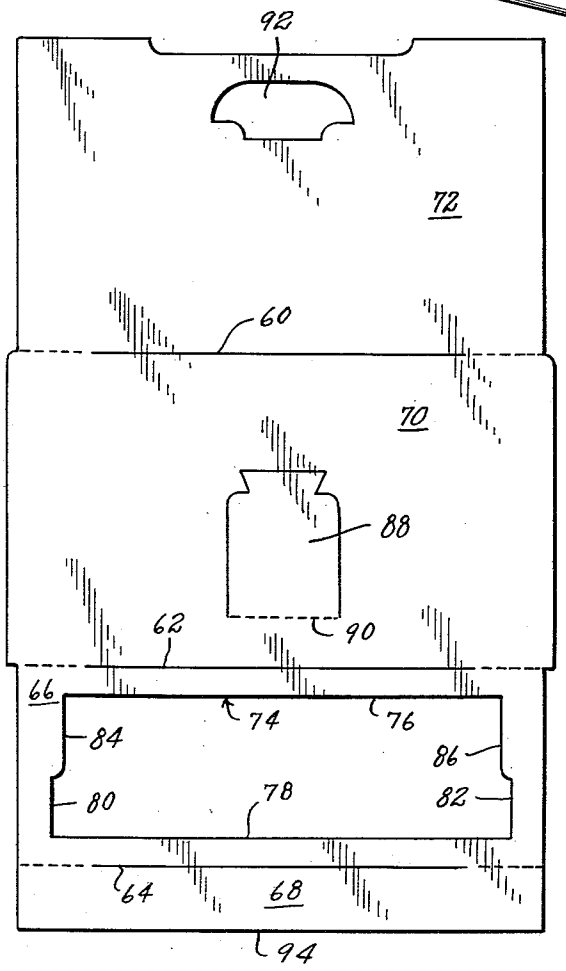


Fig. 5.

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WELL STRUCTURE FOR DISPLAY MOUNTS

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2 Claims. (Cl. 40—159)

This invention relates to display mount structures and the method for making the same. More particularly, the invention relates to an improved structure and a method for forming display windows and display material wells having overhanging display material edge and corner restraints adapted to hold such display material from warping or curling.

Applicant's prior United States Patent 2,355,706 discloses a method for forming mounts having display wells with corner or edge restraints for engaging the display material therein to hold such material against warping or curling. That method involved precutting portions of the perimeter of a display material well in an intermediate well board, and at a later stage of the fabricating process, cutting a display window in a face board and simultaneously completing the cutting of the underlying well. By that method, the cardboard panel cut from the well board must be stripped from the well board. This stripping operation has not always been convenient and sometimes resulted in damage to the mount structure, particularly in the area at which the display window, so formed, overlaps the cut-out well board.

It is, therefore, the purpose of this invention to provide an improved display mount structure and an improved method for forming display windows and display material wells in display mount structures, and particularly for the formation of such wells having display material edge and corner restraints.

It is a particular object of this invention to provide a method for forming display windows and display material wells in display mounts which does not require the stripping of well panels from the mount assembly.

The invention is adapted to use in a wide variety of display mount structures. The sequence in which the method steps are performed may, therefore, vary in accordance with the type of mount that is to be produced. Some display mounts, for example, are so-called "wrapped or bound edge" structures in which a decorative binding material is adhesively attached to exposed faces of super-imposed mount panels and is ordinarily wrapped about the edges thereof to hold an assembly of mount panels together. Another common type of mount is the so-called "died edge" mount in which a panel of appropriately lined cardboard stock is died out, scored and folded into a structure which is held together by wire stitches, spot gluing, or the like.

The method for fabricating bound edge mounts contemplates forming a display material well in display mounts by a series of steps initiated by dividing a blank of display mount stock into three or more flexibly interconnected panels constituting or at least including a back board, an intermediate board at one end of the blank having a width less than the intended width of the display window to be formed in the mount, and a face board in which the display window is to be formed.

These panels are then folded into face-to-face relation with each other such that the intermediate board lies between the face board and the back board. When so folded, the boards are secured to each other by attaching a facial covering of binding material which extends about the edges of the assembly of panels. A display window cutting operation is then performed along incisions which throughout the major portion of the perimeter of the window correspond to the outline of the material to be displayed and along incisions at spaced points along the perimeter which are inset to form overlying display material restraints. These inset incisions extend in the direction of a free edge of the intermediate board but terminate short thereof such that a gap is formed between such free edge of the intermediate board and the overlying restraints through which display material may be inserted.

The method for fabricating died edge mounts also contemplates forming a display material well in display mounts by a series of steps initiated by dividing a blank of display mount stock into three or more flexibly interconnected panels constituting or at least including a back board, an intermediate board at one end of the blank having a width less than the width of the display window, and a face board in which the display window is to be formed. The display window may be died out at any convenient time in the manfacturing operation. It is to be noted, however, that all of the cutting and/or scoring operations may be performed simultaneously on the blank from which the died edge mount is constructed.

In the case of the died edge mount, the display window cutting operation is also such that a window is cut into the face board by incisions which along the major portion of the perimeter of the window correspond to the outline of the material to be displayed and along incisions at spaced points along the perimeter which are inset to form overlying display material restraints. These inset incisions also extend in the direction of a free edge of the intermediate board when it is in its ultimate position but terminate short thereof such that a gap is formed between the free edge of the intermediate board and the overlying display material restraints when the panel sections are finally folded. The sections of the panel are now folded into face-to-face relation with each other, such that the intermediate board lies between the face board and the back board. When the folded assembly is secured into a unitary structure, as by wire stitching, the intermediate board will serve to space the back board and the face board such that display material may be easily inserted through the gap formed between the free edge of the intermediate board and the end of the inset display material restraints.

The details of the invention will be best understood by reference to the following specification when read in light of the drawing forming a part hereof.

In the drawing:

FIG. 1 is a facial perspective view of an erected bound edge mount structure made in accordance with the method of the invention;

FIG. 2 is a sectional view on line 2—2 of FIG. 1;

FIG. 3 is a somewhat exploded view of a mount structure in accordance with FIG. 1 of the invention, illustrating the manner in which the various panels are folded during the fabrication;

FIG. 4 is a perspective view of a died edge mount; and

FIG. 5 illustrates the blank from which the mount of FIG. 4 is formed.

In FIG. 1, the invention is shown embodied in a display mount having a facial assembly **10** and a supporting assembly **12**. These two assemblies are hinged to each other along a hinge line **14** about which the respective assemblies may rotate and such that the mount can be put into the erected position shown in FIG. 1. The facial assembly **10** has formed therein a display material well **16** and a display window **18** formed in the assembly according to the invention. The well **16** is adapted to receive display material, such as a monthly calendar pad **20**, which can be viewed through the display window **18**. A pair of display restraints **22** and **24** are formed at opposite ends of the display window **18** such that these restraints will overlie opposite edges of the display material seated in the well **16**.

While the method herein is directed to the fabrica-

tion of the facial assembly 10, it is contemplated that such assemblies will generally include some prop device, such as the supporting assembly 12 for holding the mount in display position. The particular nature of the prop device is of no importance insofar as the particular invention is concerned and has, therefore, been shown herein as the supporting assembly 12 which is, in effect, a duplicate of the facial assembly 10 with the exception that it contains no well or display window for receiving display material. The completed facial assembly 10 alone has substantial utility as, for example, in the case of a plaque, wall calendar or picture frame.

A mount such as that shown in FIG. 1 can be made from a single blank of display mount stock such as cardboard. In order to form the facial assembly 10, a blank of suitable stock is divided into three interconnected panels. In FIG. 3, these panels are shown as a back board 26, an intermediate board 28 and a face board 30. These three boards are interconnected but articulated for folding along a pair of suitable score lines or hinge joints 32 and 34. Thus, the back board 26 may be considered as being disposed at one end of the blank, the intermediate board 28 at the other end of the blank, and the face board 30 in that area of the blank embraced between the back board and the intermediate board. In case the facal assembly alone is to be fabricated, the intermediate board 28 may just as readily be formed as an extension of the back board 26.

FIG. 3 also discloses how the supporting assembly 12 may be formed from the same blank of which the facial assembly 10 is formed. Thus, a first supporting panel 36 is hinged to the back board 26 along a score or hinge line 38 and a second supporting panel 40 may be hinged to the first supporting panel 36 along a score or hinge line 42. This permits the first and second supporting panels of the supporting assembly 12 to be rotated into face-to-face contact to produce a stronger single supporting structure.

After the back board 26, the intermediate board 28 and the face board 30 have been formed in the blank by score or hinge lines 32 and 34, the intermediate board 28 is first folded inwardly such that it rests against the inner face of the board 30. The back board 26 is then folded upwardly on the score or hinge line 34 such that it is in face-to-face contact with the intermediate board 28. If a supporting assembly, such as the supporting assembly 12, is to be formed, the second panel 40 thereof is rotated about the score or hinge line 42 such that the second panel 40 is in face-to-face contact with the first panel 36. At this point, the panels of the facial assembly as well as those of the supporting assembly, are secured to each other. The secured assembly panels are now in condition to rotate in respect to each other on the hinge line 38. Any suitable method for securing the respective panels to each other may be employed. The mount of FIG. 1 utilizes a flexible decorative binding material to hold the panel assemblies together. Accordingly, a binding material 44 may be attached as by gluing to one entire face of the extended panel assemblies. This binding material is brought about two or more edges of the panel structures and terminates on the opposite face of the panel structure or structures as shown in FIG. 1. Also, as shown in FIG. 1, a lining sheet 46 may be glued to that face of the panel structure on which the binding material 44 terminates, such that the lining sheet 46 will serve to cover the exposed terminal edges of the binding material.

It should be noted at this point that the intermediate board 28 is of a width which is substantially less than the width of the face board 30 (FIG. 3). Ordinarily, the free edge of the intermediate board 28 will be located somewhat above the horizontal axis of the display window area. The intermediate board, therefore, serves as a spacer between the boards 26 and 30, providing a pocket for edges of an article to be displayed.

The folded mount structure of FIGS. 1–3 is next die-cut to form therein the display window 18. Accordingly, the flexible binding material 44 and the face board 30 are died out along incisions which, throughout the major portion of the perimeter of the window 18 correspond to the outline of the material to be displayed. Thus, in FIG. 1, the display window 18 corresponds to the outline of the calendar pad 20 along the top edge thereof, at the upper portions of the lateral edges and throughout the major portion of the bottom edge. The dieing incisions at spaced points along the perimeter of the window are inset. In the drawing, these inset incisions are shown as formed near the opposite lateral edges 48 and 50 of the window. This insetting of the dieing incisions along the lines 48 and 50 results in the formation of the display material restraints 22 and 24. It is important to note that the inset incisions along the lines 48 and 50 extend in the direction of the free edge 52 of the intermediate board 28 and that they terminate short thereof whereby a gap is formed between the free edge 52 of the intermediate board 28 and the display material restraints 22 and 24. One such gap 54 is shown in FIG. 1.

After the panel severed from the face board 30 by the die cutting operation is stripped therefrom, it will be seen that the depending portion of the intermediate board 28 serves to space the face board 30 from the back board 26. The space 56, so formed, is apparent in FIG. 2.

The gaps between the edge 52 of the intermediate board 28 and the upper end of the display material restraints 22 and 24 provide a suitable passage for the insertion of the display material, such as the calendar pad 20. The lower edge of the pad is inserted through the gaps and the pad is seated in the window opening. The pad as a whole is securely held within the recess by the overlying restraints 22 and 24. It will noted that the space 56 facilitates the insertion of the display material as described.

The display material may be secured to the assembly such as by stapling, but it has been found that the restraints 22 and 24 are sufficient to hold the display material in its intended position within the display window. A relatively thin calendar pad, or single sheet of display material, may enjoy further edge restraint by sliding the same between the panels 26 and 30 at the lower edge of the display window. Furthermore, it is a convenient arrangement, for such items as calendar pads, to be able to remove the same for change at the end of the month.

The specific nature of the died edge mount of FIG. 4 and the method for its manufacture can best be ascertained by reference to the blank of FIG. 5 from which it is constructed. A plurality of transverse score lines 60, 62 and 64 divide the blank into separate articulated panels. These score lines may be formed in any one of a variety of ways which will permit the panels to fold upon themselves. Ordinarily, the material from which the mount is formed will be of cardboard stock which is lined on its opposite faces with a decorative paper. In such event, the score lines may be formed by routing the blank along the lines on which it is to fold such as to remove one liner and substantially all of the underlying cardboard, permitting the other liner on the opposite face to remain as a hinge on which the panels may rotate.

In FIG. 4, the transverse scoring defines a face board 66, an intermediate board 68 and a back board 70 which comprise the essentials of the structure. A supporting prop panel 72 may also be included. It can be seen, therefore, that the blank includes a back board 70, a face board 66 which is adapted to the formation of a display window therein and an intermediate board 68 having a width substantially less than the width of the display window to be formed in the face board.

A display window 74 is cut into the face board 66. This operation is preferably performed at the same time that the other cutting and scoring operations are performed. The display window 74 is cut along incisions 76, 78, 80 and 82 which correspond to the outline of the

material to be displayed therein and along incisions 84 and 86 at spaced points along the perimeter of the window which are inset to form overlying display material restraints. A locking tongue 88 may be formed in the back board 70 to swing rearwardly on a score line 90 in order to engage a locking tongue slot 92 formed in the supporting prop 72. However, resort may be had to any suitable means for holding the supporting prop 72 in proper angular position when the mount is in display use, or the prop and the locking tongue may be dispensed with in structures designed as wall plaques or the like.

Panels of the blank are folded into face-to-face relation with each other to form a display support assembly. Thus the intermediate board 68 is folded inwardly about the fold line 64 such that it lies in contact with the face board 66. The face board 66 is then folded upwardly along the fold lines 62 such that the intermediate board 68 lies in contact with the face of the back board 70. The intermediate board 68, therefore, serves to positively space the face board 66 from the back board 70 throughout at least a portion of their width to provide a display material well therebetween.

When the face board 66 and the intermediate board 68 are fixed in folded position to the back board 70 as by passing one or more wire staples through the intermediate board 68 and the back board 70, the free ends of the display material restraints formed by the inset incisions 84 and 86 will extend in the direction of the free edge 94 of the intermediate board 68 and will terminate short thereof whereby a gap 96 is formed between said free edge of the overlying restraints through which display material may be inserted.

While the intermediate board in both embodiments will serve to space the face board and the back board from each other throughout a substantial portion of their width, it should be observed that the bottom edge of the display window nevertheless rests substantially in contact with the back board. This disposition of the bottom edge of the display window serves a useful purpose in that it forms an abutment for the lower edge of the display material within the display area and limits its downward movement between the face board and the back board.

While the fundamentally novel features of the invention have been illustrated and described in connection with specific embodiments of the invention, it is believed that these embodiments will enable others skilled in the art to apply the principles of the invention in forms departing from the exemplary embodiments herein, and such departures are contemplated by the claims.

What is claimed is:

1. A display mount comprising a face board, a display window in said face board which throughout the major portion of its perimeter corresponds to the outline of material to be displayed therein and which at spaced points along its perimeter is inset to form display material restraints adapted to overlie display material thereunder, and an intermediate board having a free edge and a width substantially less than the width of said face board disposed between said face board and said back board along one edge of said display window whereby said back board and said face board are positively spaced from each other by said intermediate board throughout a major portion of the width of said display window to provide a display material well between said face board and said back board, said display material restraints terminating short of the free edge of said intermediate board whereby a gap is formed between said free edge and said overlying restraints.

2. The invention of claim 1, in which said display window is generally rectangular in shape, said display material restraints are located at opposite ends of said display window and the free edge of said intermediate board is located above the horizontal axis of said display window.

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